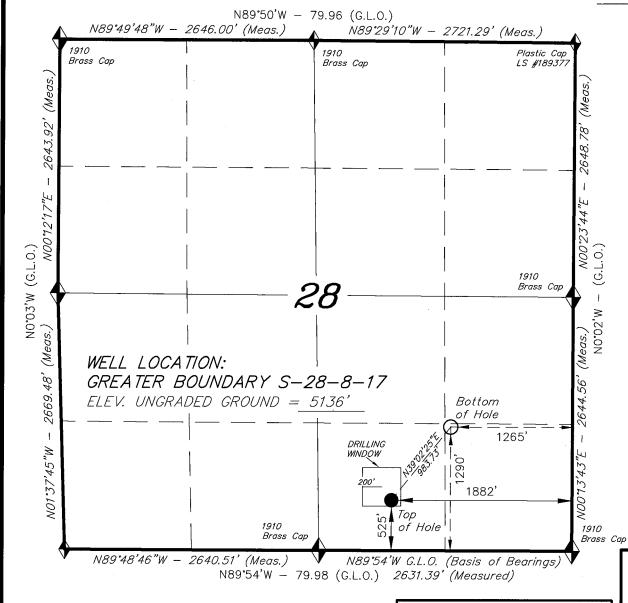
Form 3160-3 (September 2001)				OME	RM APPROVED B No. 1004-013 s January 31, 20	6	
UNITED STATES DEPARTMENT OF THE IN BUREAU OF LAND MANAG	NTERIOR			5. Lease Serial I	No. U-76241		
APPLICATION FOR PERMIT TO DE		REENTER	Ī	6. If Indian, Allo	ottee or Tribe	Name	
					N/A		
1a. Type of Work: DRILL REENTER				7. If Unit or CA Agreement, Name and No.			
				Greater Boundary II Unit			
1b. Type of Well: Oil Well Gas Well Other	×	Single Zone	iple Zone	8. Lease Name ar Greater Bound		S-28-8-17	
Name of Operator Newfield Production Company				9. API Well No.	43013	-3397	
3a. Address	1	No. (include area code)		10. Field and Pool,	_		
Route #3 Box 3630, Myton UT 84052	(43	35) 646-3721		Monumen		<u>y</u>	
Location of Well (Report location clearly and in accordance with a At surface SW/SE 525' FSL 1882' FEL	any State req	uirements.*)		11. Sec., T., R., M.	., or Blk. and	Survey or Area	
At proposed prod. zone & 1290' FSL 1265' FEL		Sec. 28, T	8S R17E				
14. Distance in miles and direction from nearest town or post office*				12. County or Pari	sh	13. State	
Approximatley 12.9 miles southeast of Myton, Utah				Duchesne		UT	
15. Distance from proposed* location to nearest property or lease line, ft.	st		17. Spacing	ing Unit dedicated to this well			
(Also to nearest drig. unit line, if any) Approx. 2610' f/lse, 2610' f/unit	18	80.00		20 Acres			
 Distance from proposed location* to nearest well, drilling, completed, 	19. Propos	sed Depth	20. BLM/B	IA Bond No. on file	;		
applied for, on this lease, ft. Approx. 1406'	63	360'	W	YB000493			
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5136' GL		ximate date work will starter 2008	ırt*	23. Estimated dura Approximately seven (7)		ig release.	
	24. Att	achments	······································	L.,			
The following, completed in accordance with the requirements of Onshor	e Oil and Ga	s Order No.1, shall be at	tached to this	form:			
 Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office). 	Lands, the	4. Bond to cover the stem 20 above). 5. Operator certific 6. Such other site authorized office.	ation. specific info	·	_	·	
25. Signature	Nam	e (Printed/Typed)			Date		
The tandia Crossin		ndie Crozier			4/22/08	8	
Title Régulatory Specialist							
Approved by Signdland	Nam	e (Printed/Typed)			Date		
Deally	- 1	BRADLEY C	i. HILL		105-	0508	
Title	Offi	ENVIRONMENTAL	MANAGER				
Application approval does not warrant or certify the the applicant holds le operations thereon. Conditions of approval, if any, are attached.	gal or equita	ble title to those rights in	the subject le	ease which would en	title the appli	cant to conduct	
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it States any false, fictitious or fraudulent statements or representations as to	a crime for a	ny person knowingly an within its jurisdiction.	d willfully to	make to any depart	tment or agen	cy of the United	
*(Instructions on reverse)							
er f BHC	/	Federal Action Is	Approval o Necessar	r this REC	EIVEI 29 2008	D	
584571X 58) } 4 75	7 X		APR	2 9 2003	}	

44374924 40.085332 -110.005853

DIV. OF OIL, GAS & MINING

44372564 40.683229 -110.668070

T8S, R17E, S.L.B.&M.

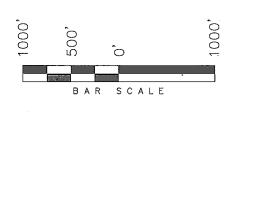


= SECTION CORNERS LOCATED

BASIS OF ELEV; U.S.G.S. 7-1/2 min QUAD (MYTON SE) GREATER BOUNDARY S-28-8-17 (Surface Location) NAD 83 LATITUDE = 40° 04' 59.26" LONGITUDE = 110° 00' 31.76"

NEWFIELD PRODUCTION COMPANY

WELL LOCATION, GREATER BOUNDARY S-28-8-17, LOCATED AS SHOWN IN THE SW 1/4 SE 1/4 OF SECTION 28, T8S, R17E, S.L.B.&M. DUCHESNE COUNTY, UTAH.



THIS IS TO CERTIFY THAT OFFIE ABOVE PER WAS PREPARED FROM FIELD OF ACTUME SURVEYS MADE BY ME OR UNDER MY SUPPRESION AND THAT THE SAME ARE TRUE AND SORRECT TO THE BEST OF MY KNOWLEDGE AND SPLIED NO.189377

STATE OF GRAPHITE OF WAR

TRI STATE LAND SURVEYING & CONSULTING

180 NORTH VERNAL AVE. - VERNAL, UTAH 84078 (435) 781-2501

DATE SURVEYED: 02-25-08	SURVEYED BY: T.H.
DATE DRAWN: 03-11-08	DRAWN BY: L.C.S.
REVISED:	SCALE: 1" = 1000'

NEWFIELD PRODUCTION COMPANY GREATER BOUNDARY II FEDERAL S-28-8-17 AT SURFACE: SW/SE SECTION 28, T8S, R17E DUCHESNE COUNTY, UTAH

ONSHORE ORDER NO. 1

DRILLING PROGRAM

1. GEOLOGIC SURFACE FORMATION:

Uinta formation of Upper Eocene Age

2. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:

Uinta 0' - 1633' Green River 1633' Wasatch 6360'

3. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS:

Green River Formation 1633' - 6360' - Oil

4. PROPOSED CASING PROGRAM

Please refer to the Monument Butte Field Standard Operation Procedure (SOP).

5. <u>MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:</u>

Please refer to the Monument Butte Field SOP. See Exhibit "C".

6. TYPE AND CHARACTERISTICS OF THE PROPOSED CIRCULATION MUDS:

Please refer to the Monument Butte Field SOP.

7. <u>AUXILIARY SAFETY EQUIPMENT TO BE USED:</u>

Please refer to the Monument Butte Field SOP.

8. TESTING, LOGGING AND CORING PROGRAMS:

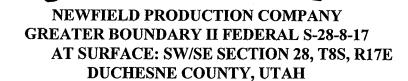
Please refer to the Monument Butte Field SOP.

9. <u>ANTICIPATED ABNORMAL PRESSURE OR TEMPERATURE:</u>

The anticipated maximum bottom hole pressure is 1800 psi. It is not anticipated that abnormal temperatures will be encountered.

10. ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS:

Please refer to the Monument Butte Field SOP.



ONSHORE ORDER NO. 1

MULTI-POINT SURFACE USE & OPERATIONS PLAN

1. EXISTING ROADS

See attached Topographic Map "A"

To reach Newfield Production Company well location site Greater Boundary II Federal S-28-8-17 located in the SW 1/4 SE 1/4 Section 28, T8S, R17E, Duchesne County, Utah:

Proceed southwesterly out of Myton, Utah along Highway 40 - 1.4 miles \pm to the junction of this highway and UT State Hwy 53; proceed southeasterly -9.8 miles \pm to it's junction with an existing road to the east; proceed in a northeasterly direction -1.6 miles \pm to to it's junction with and existing road to the east; proceed easterly -0.1 miles \pm to the beginning of the access road existing Tar Sands Federal 15-28-8-17 well location.

2. PLANNED ACCESS ROAD

There is no proposed access road for this location. The proposed well will be drilled directionally off of the existing Tar Sands Federal 15-28-8-17 well pad. See attached **Topographic Map "B"**.

3. LOCATION OF EXISTING WELLS

Refer to Exhibit "B".

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

The proposed well will be drilled directionally off of the Tar Sands Federal 15-28-8-17 well pad. There will be a pumping unit and a short flow line added to the tank battery for the proposed Greater Boundary II Federal S-28-8-17. All permanent surface equipment will be painted Carlsbad Canyon.

Please refer to the Monument Butte Field Standard Operating Procedure (SOP).

5. LOCATION AND TYPE OF WATER SUPPLY

Newfield Production will transport water by truck for drilling purposes from the following water sources:

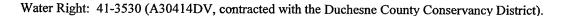
Johnson Water District Water Right: 43-10136

Neil Moon Pond

Water Right: 43-11787

Maurice Harvey Pond Water Right: 47-1358

Newfield Collector Well



Please refer to the Monument Butte Field SOP. See Exhibit "A".

6. <u>SOURCE OF CONSTRUCTION MATERIALS</u>

The proposed Greater Boundary II Federal S-28-8-17 will be drilled off of the existing Tar Sands Federal 15-28-8-17 well pad. No additional surface disturbance will be required for this location.

7. <u>METHODS FOR HANDLING WASTE DISPOSAL</u>

Please refer to the Monument Butte Field SOP.

8. <u>ANCILLARY FACILITIES</u>

Please refer to the Monument Butte Field SOP.

9. WELL SITE LAYOUT

See attached Location Layout Diagram.

10. PLANS FOR RESTORATION OF SURFACE

Please refer to the Monument Butte Field SOP.

 SURFACE OWNERSHIP - Bureard Of Land Management (Proposed location and access roads leading to).

12. OTHER ADDITIONAL INFORMATION

Water Disposal

Immediately upon first production, all produced water will be confined to a steel storage tank. If the production water meets quality guidelines, it is transported to the Ashley, Monument Butte, Jonah, and Beluga water injection facilities by company or contract trucks. Subsequently, the produced water is injected into approved Class II wells to enhance Newfield's secondary recovery project.

Water not meeting quality criteria, is disposed at Newfield's Pariette #4 disposal well (Sec. 7, T9S R19E) or at State of Utah approved surface disposal facilities.

Threatened, Endangered, And Other Sensitive Species

None for the proposed Greater Boundary II Federal S-28-8-17

Reserve Pit Liner

A 16 mil liner with felt is required. Please refer to the Monument Butte Field SOP.

Location and Reserve Pit Reclamation

Please refer to the Monument Butte Field SOP.

The following seed mixture will be used on the topsoil stockpile, to the recontoured surface of the reserve pit, and for final reclamation: (All poundages are in pure live seed)

Squirrell Tail	Elymus Elymoides	6 lbs/acre
Siberian Wheatgrass	Agropyron Fragile	2 lbs/acre
Gardner Saltbush	Atriplex Gardneri	1 lbs/acre
Shadscale	Atriplex Confertifolia	1 lbs/acre
Fourwing Saltbush	Atriplex Canescens	1 lbs/acre
Scarlet Globemallow	Sphaeralcea Conccinea	0.20 lbs/acre

Details of the On-Site Inspection

The proposed Greater Boundary II Federal S-28-8-17 was on-sited on 3/26/08. The following were present; Dave Allred (Newfield Production), Kevan Stevens (Newfield Production), Michael Cutler (Bureau of Land Management), Brandon McDonald (Bureau of Land Management) and James Herford (Bureau of Land Management). Weather conditions were clear and ground cover was 100% open.

LESSEE'S OR OPERATORS REPRESENTATIVE AND CERTIFICATION

Representative

Name:

Dave Allred

Address:

Route #3 Box 3630

Myton, UT 84052

Telephone:

(435) 646-3721

Certification

Please be advised that NEWFIELD PRODUCTION COMPANY is considered to be the operator of well #S-28-8-17 SW/SE Section 28, Township 8S, Range 17E: Lease UTU-76241 Duchesne County, Utah: and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond coverage is provided by, Federal Bond #WYB000493.

I hereby certify that the proposed drill site and access route have been inspected, and I am familiar with the conditions which currently exist; that the statements made in this plan are true and correct to the best of my knowledge; and that the work associated with the operations proposed here will be performed by Newfield Production Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

4/22/08 Date

Mandie Crozier

Regulatory Specialist

Newfield Production Company

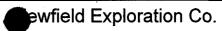


oject: Duchesne County, UT NAD83 UTC

Site: Greater Boundary

Well: Greater Bounrady S-28-8-17

Wellbore: OH Design: Plan #1



M

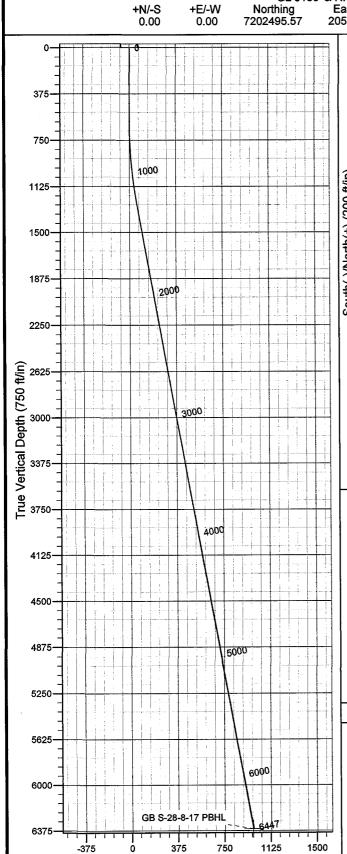
Azimuths to True North Magnetic North: 11.69

Magnetic Field Strength: 52637.1snT Dip Angle: 65.92 Date: 2008-04-23 Model: IGRF2005-1

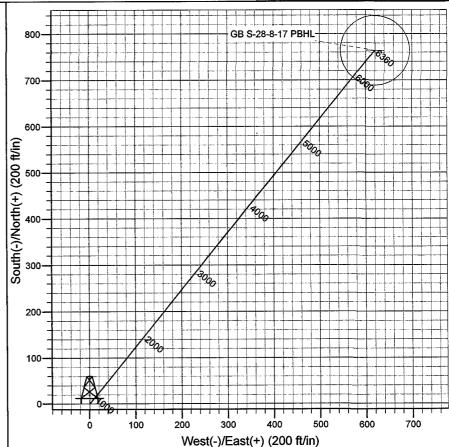
WELL DETAILS: Greater Bounrady S-28-8-17

GL 5136' & RKB 12' @ 5148.00ft 5136.00 Easting Latitude 2057628.96 40° 4' 59.260 N

Longitude 110° 0' 31.760 W



Vertical Section at 39.04° (750 ft/in)



Plan: Plan #1 (Greater Bounrady S-28-8-17/OH)

Created By: Julie Cruse Date: 2008-04-23

PROJECT DETAILS: Duchesne County, UT NAD83 UTC

Geodetic System: US State Plane 1983 Datum: North American Datum 1983

Ellipsoid: GRS 1980

Zone: Utah Central Zone

Location:

System Datum: Mean Sea Level

Local North: True

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	
1286.32	10.29	39.04	1282.63	47.76	38,73	1.50	39.04	61.49	
6446.76	10.29	39.04	6360.00	764.07	619.61	0.00	0.00	983.73	GB S-28-8-17 PBHL

Newfield Exploration Co.

Duchesne County, UT NAD83 UTC Greater Boundary Greater Bounrady S-28-8-17 OH

Plan: Plan #1

Standard Planning Report

23 April, 2008

Scientific Drilling

Planning Report

Database:

EDM 2003.16 Multi-User Db

Company:

Newfield Exploration Co. Duchesne County, UT NAD83 UTC

Project: Site:

Well:

Greater Boundary

Greater Bounrady S-28-8-17

Wellbore: Design:

ОН Plan #1 Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference: **Survey Calculation Method:** Well Greater Bounrady S-28-8-17

GL 5136' & RKB 12' @ 5148.00ft GL 5136' & RKB 12' @ 5148.00ft

True

Minimum Curvature

Project

Duchesne County, UT NAD83 UTC

Map System:

US State Plane 1983

North American Datum 1983

Geo Datum: Map Zone:

Utah Central Zone

System Datum:

Mean Sea Level

Site

Greater Boundary

Site Position:

Lat/Long

Northing: Easting:

7,202,495.58 ft

Latitude:

40° 4' 59.260 N

From: Position Uncertainty:

0.00 ft

Slot Radius:

2,057,628.96ft in Longitude: **Grid Convergence:** 110° 0' 31.760 W

0.96°

Well

Greater Bounrady S-28-8-17, 525' FSL 1882' FEL Sec 28 T8S R17E

Well Position

+N/-S +E/-W 0.00 ft 0.00 ft Northing: Easting:

7,202,495.57 ft 2,057,628.96 ft Latitude: Longitude:

40° 4' 59,260 N 110° 0' 31.760 W

Position Uncertainty

0.00 ft

Wellhead Elevation:

ft

Ground Level:

5,136.00 ft

Wellbore

ОН

Magnetics

Model Name

Sample Date

Declination (°)

Dip Angle (°)

Field Strength

(nT)

IGRF2005-10

2008-04-23

11.69

65.92

52,637

Design

Plan #1

Audit Notes:

Version:

Phase:

PLAN

Tie On Depth:

0.00

Depth From (TVD)

+N/-S

+E/-W

Direction

Vertical Section:

(ft) 0.00

(ft) 0.00

(ft) 0.00

(°) 39.04

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,286.32	10.29	39.04	1,282.63	47.76	38.73	1.50	1.50	0.00	39.04	
6,446.76	10.29	39.04	6,360.00	764.07	619.61	0.00	0.00	0.00	0.00 G	B \$-28-8-17 PBHI

Scientific Drilling

Planning Report

Database:

EDM 2003.16 Multi-User Db Newfield Exploration Co.

Company: Project:

Duchesne County, UT NAD83 UTC

Site:

Greater Boundary

Well: Greater Bounrady S-28-8-17

Wellbore: Design: OH Plan #1 Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method: Well Greater Bounrady S-28-8-17 GL 5136' & RKB 12' @ 5148.00ft

GL 5136' & RKB 12' @ 5148.00ft GL 5136' & RKB 12' @ 5148.00ft

True

Minimum Curvature

ed Survey									
Moss			Vertical			Vertical	Dogleg	Build	Turn
Measured									
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Section	Rate	Rate	Rate
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
			200.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00							
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	1.50	39.04	699.99	1.02	0.82	1.31	1.50	1.50	0.00
800.00	3.00	39.04	799.91	4.07	3.30	5.23	1.50	1.50	0.00
900.00	4.50	39.04	899.69	9.15	7.42	11.77	1.50	1.50	0.00
4 000 00	0.00	20.04	999.27	16.05	13.18	20.92	1.50	1.50	0.00
1,000.00	6.00	39.04		16.25				1.50	0.00
1,100.00	7.50	39.04	1,098.57	25.38	20.58	32.68	1.50		
1,200.00	9.00	39.04	1,197.54	36.53	29.62	47.03	1.50	1.50	0.00
1,286.32	10.29	39.04	1,282.63	47.76	38.73	61.49	1.50	1.50	0.00
1,300.00	10.29	39.04	1,296.09	49.66	40.27	63.94	0.00	0.00	0.00
•		39.04	1,394.48	63.54	51.53	81.81	0.00	0.00	0.00
1,400.00	10.29								
1,500.00	10.29	39.04	1,492.87	77.42	62.78	99.68	0.00	0.00	0.00
1,600.00	10.29	39.04	1,591.26	91.30	74.04	117.55	0.00	0.00	0.00
1,700.00	10.29	39.04	1,689.65	105.18	85.30	135.42	0.00	0.00	0.00
1,800.00	10.29	39.04	1,788.04	119.06	96.55	153.29	0.00	0.00	0.00
1,900.00	10.29	39.04	1,886.43	132.95	107.81	171.17	0.00	0.00	0.00
2,000.00	10.29	39.04	1,984.82	146.83	119.07	189.04	0.00	0.00	0.00
2,100.00	10.29	39.04	2,083.21	160.71	130.32	206.91	0.00	0.00	0.00
2,200.00	10.29	39.04	2,181.60	174.59	141.58	224.78	0.00	0.00	0.00
2,300.00	10.29	39.04	2,279.99	188.47	152.84	242.65	0.00	0.00	0.00
						200 50	0.00	0.00	0.00
2,400.00	10.29	39.04	2,378.38	202.35	164.09	260.52	0.00		
2,500.00	10.29	39.04	2,476.77	216.23	175.35	278.39	0.00	0.00	0.00
2,600.00	10.29	39.04	2,575.16	230.11	186.61	296.26	0.00	0.00	0.00
2,700.00	10.29	39.04	2,673.55	243.99	197.86	314.14	0.00	0.00	0.00
2,800.00	10.29	39.04	2,771.94	257.87	209.12	332.01	0.00	0.00	0.00
2,800.00	10.29								
2,900.00	10.29	39.04	2,870.33	271.75	220.38	349.88	0.00	0.00	0.00
3,000.00	10.29	39.04	2,968.73	285.63	231.63	367.75	0.00	0.00	0.00
3,100.00	10.29	39.04	3,067.12	299.51	242.89	385.62	0.00	0.00	0.00
3,200.00	10.29	39.04	3,165.51	313.39	254.14	403.49	0.00	0.00	0.00
3,300.00	10.29	39.04	3,263.90	327.28	265.40	421.36	0.00	0.00	0.00
3,400.00	10.29	39.04	3,362.29	341.16	276.66	439.23	0.00	0.00	0.00
3,500.00	10.29	39.04	3,460.68	355.04	287.91	457.11	0.00	0.00	0.00
,					299.17	474.98	0.00	0.00	0.00
3,600.00	10.29	39.04	3,559.07	368.92					
3,700.00	10.29	39.04	3,657.46	382.80	310.43	492.85	0.00	0.00	0.00
3,800.00	10.29	39.04	3,755.85	396.68	321.68	510.72	0.00	0.00	0.00
3,900.00	10.29	39.04	3,854.24	410.56	332.94	528,59	0.00	0.00	0.00
4,000.00	10.29	39.04	3,952.63	424.44	344.20	546.46	0.00	0.00	0.00
					355.45	564.33	0.00	0.00	0.00
4,100.00	10.29	39.04	4,051.02	438.32					
4,200.00	10.29	39.04	4,149.41	452.20	366.71	582.20	0.00	0.00	0.00
4,300.00	10.29	39.04	4,247.80	466.08	377.97	600.08	0.00	0.00	0.00
4,400.00	10.29	39.04	4,346.19	479.96	389.22	617.95	0.00	0.00	0,00
			4,444.58	493.84	400.48	635.82	0.00	0.00	0.00
4,500.00	10.29	39.04							
4,600.00	10.29	39.04	4,542.97	507.73	411.73	653.69	0.00	0.00	0.00
4,700.00	10.29	39.04	4,641.36	521.61	422.99	671.56	0.00	0.00	0.00
4,800.00	10.29	39.04	4,739.75	535.49	434.25	689.43	0.00	0.00	0.00
·							0.00	0.00	0.00
4,900.00	10.29	39.04	4,838.14	549.37	445.50	707.30		0.00	0.00
5,000.00	10.29	39.04	4,936.53	563.25	456.76	725.17	0.00		
5,100.00	10.29	39.04	5,034.92	577.13	468.02	743.05	0.00	0.00	0.00
5,200.00	10.29	39.04	5,133.31	591.01	479.27	760.92	0.00	0.00	0.00

Scientific Drilling

Planning Report

Database:

EDM 2003.16 Multi-User Db

Company: Project: Newfield Exploration Co.
Duchesne County, UT NAD83 UTC

Site:

Greater Boundary

Well:

Greater Bounrady S-28-8-17

Wellbore: Design: OH Plan #1 Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference:

Survey Calculation Method:

Well Greater Bounrady S-28-8-17

GL 5136' & RKB 12' @ 5148.00ft

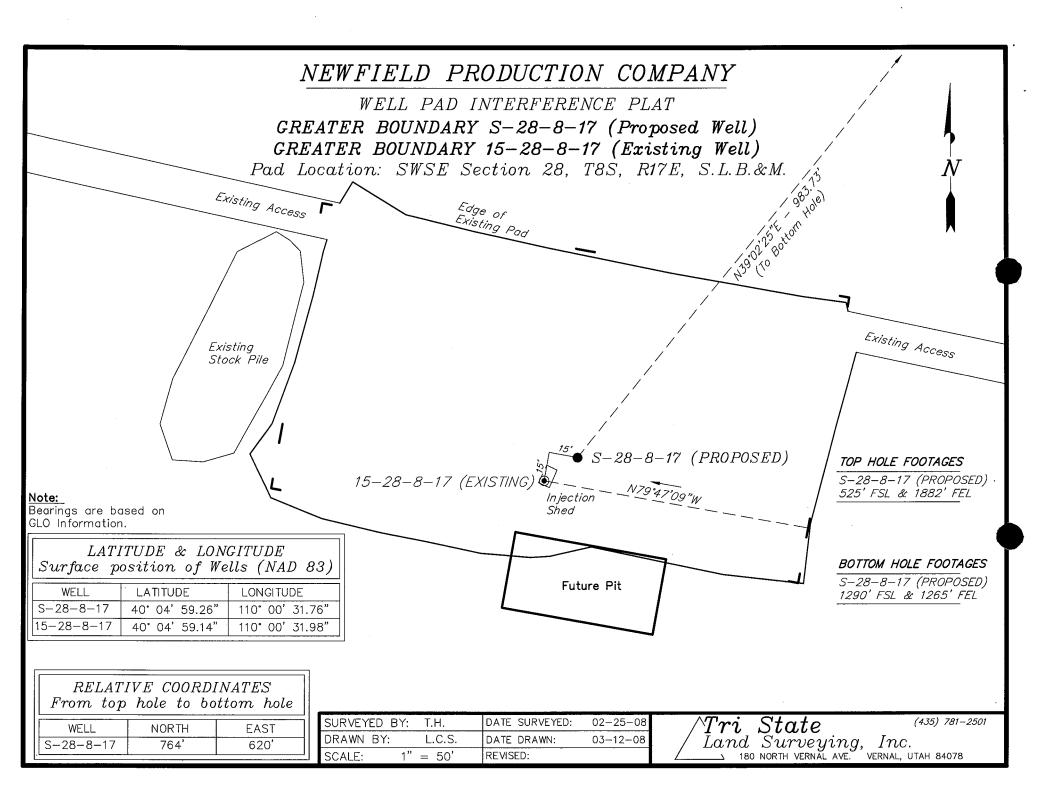
GL 5136' & RKB 12' @ 5148.00ft

True

Minimum Curvature

Measured Depth (ft)	inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,300.00	10.29	39.04	5,231.70	604.89	490.53	778.79	0.00	0.00	0.00
5,400.00	10.29	39.04	5,330.09	618.77	501.79	796.66	0.00	0.00	0.00
5,500.00	10.29	39.04	5,428.48	632.65	513.04	814.53	0.00	0.00	0.00
5,600.00	10.29	39.04	5,526.87	646.53	524.30	832.40	0.00	0.00	0.00
5,700.00	10.29	39.04	5,625.26	660.41	535.56	850.27	0.00	0.00	0.00
5,800.00	10.29	39.04	5,723.65	674.29	546.81	868.15	0.00	0.00	0.00
5,900.00	10.29	39.04	5,822.04	688.17	558.07	886.02	0.00	0.00	0.00
6,000.00	10.29	39.04	5,920.43	702.06	569.33	903.89	0.00	0.00	0.00
6,100.00	10.29	39.04	6,018.82	715.94	580.58	921.76	0.00	0.00	0.00
6,200.00	10.29	39.04	6,117.21	729.82	591.84	939.63	0.00	0.00	0.00
6,300.00	10.29	39.04	6,215.60	743.70	603.09	957.50	0.00	0.00	0.00
6,400.00	10.29	39.04	6,313.99	757.58	614.35	975.37	0.00	0.00	0.00
6,446,76	10.29	39.04	6,360.00	764.07	619.61	983.73	0.00	0.00	0.00

Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)		
GB S-28-8-17 PBHL	0.00	0.00	6,360.00	764.07	619.61	7,203,269.87	2,058,235.75	Latitude 40° 5' 6.811 N	Longitude 110° 0' 23.788 W
- plan hits target ce - Circle (radius 75.0	nter	0.00	0,000.00	, , , , ,		.,,	_, ,		

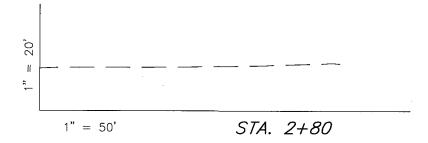


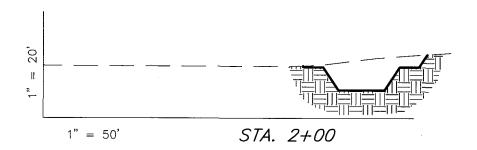
NEWFIELD PRODUCTION COMPANY GREATER BOUNDARY S-28-8-17 (Proposed Well) GREATER BOUNDARY 15-28-8-17 (Existing Well) Pad Location: SWSE Section 28, T8S, R17E, S.L.B.&M. Existing Access PREVAILING WIND (3)4 (2)STA. 2+80 PIT TOPSOIL STOCKPILE C/1.3 48 STA. 2+00 RESERVE BENCH 8' Deep WELL HEAD: EXISTING GRADED GROUND = 5136Proposed Well S-28-8-17 Injection Shed 5 STA. 1+46 104 (1)119 Existing Wel 40' (D) 36 C/0.6 *Note:* Flare pit is to be located at EXCESS least 80' from MA TERIAL well head. STA. 0+50 8 STA. 0+00. (6)Access Existing Stock Pile Tri State Land Surveying, Inc. 180 NORTH VERNAL AVE. VERNAL, UTAH 84078 SURVEYED BY: DATE SURVEYED: (435) 781-2501 T.H. 02-25-08 DRAWN BY: L.C.S. DATE DRAWN: 03-12-08 REVISED: SCALE: 1" = 50'

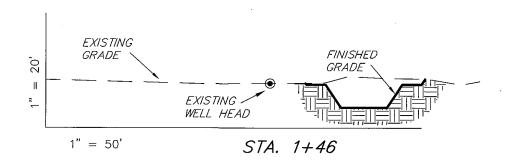
NEW TIELD PRODUCTION COMPANY

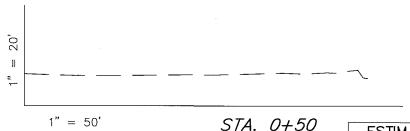
CROSS SECTIONS

GREATER BOUNDARY S-28-8-17 (Proposed Well) GREATER BOUNDARY 15-28-8-17 (Existing Well)







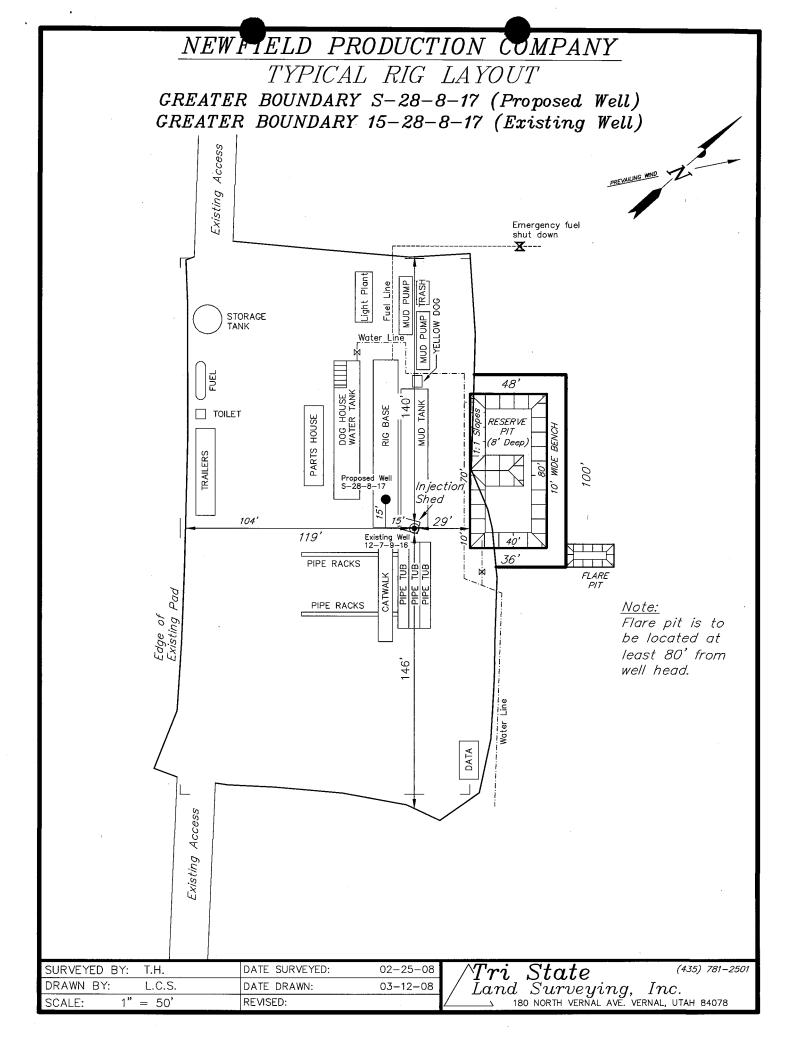


NOTE: UNLESS OTHERWISE NOTED CUT SLOPES ARE AT 1:1 FILL SLOPES ARE AT 1.5:1 ESTIMATED EARTHWORK QUANTITIES
(No Shrink or swell adjustments have been used)
(Expressed in Cubic Yards)

ITEM CUT FILL 6" TOPSOIL **EXCESS** Topsoil is not included in Pad Cut PAD 510 0 510 PIT 640 0 640 TOTALS 1150 130 1150

SURVEYED BY: T.H.	DATE SURVEYED:	02-28-08
DRAWN BY: L.C.S.	DATE DRAWN:	03-12-08
SCALE: $1" = 50'$	REVISED:	

	$\overline{\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ }$	Sta	tte			(435)	781–25	501
	Land			lng	In	c.		
/		NORTH					8/078	



ewfield Production Compa Proposed Site Facility Diagram

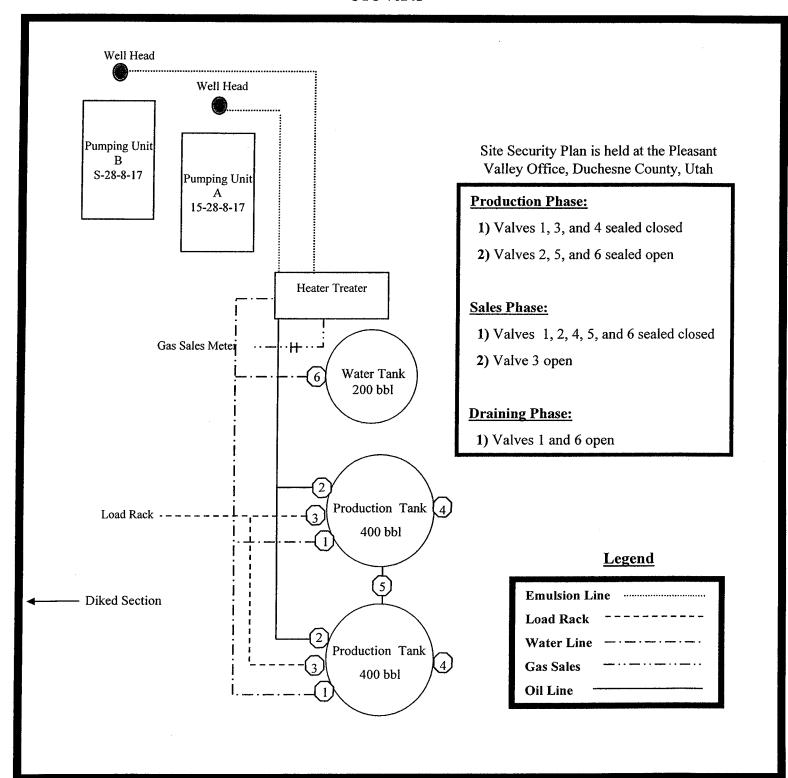
Greater Boundary II Federal S-28-8-17

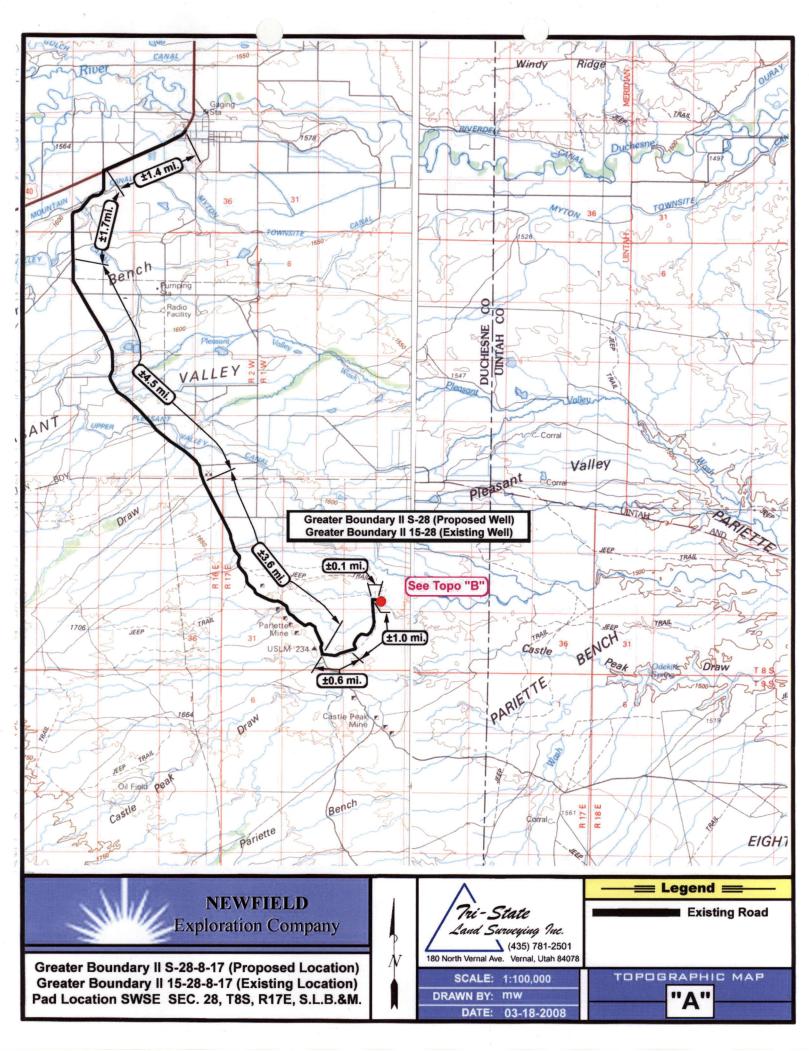
From the 15-28-8-17 Location

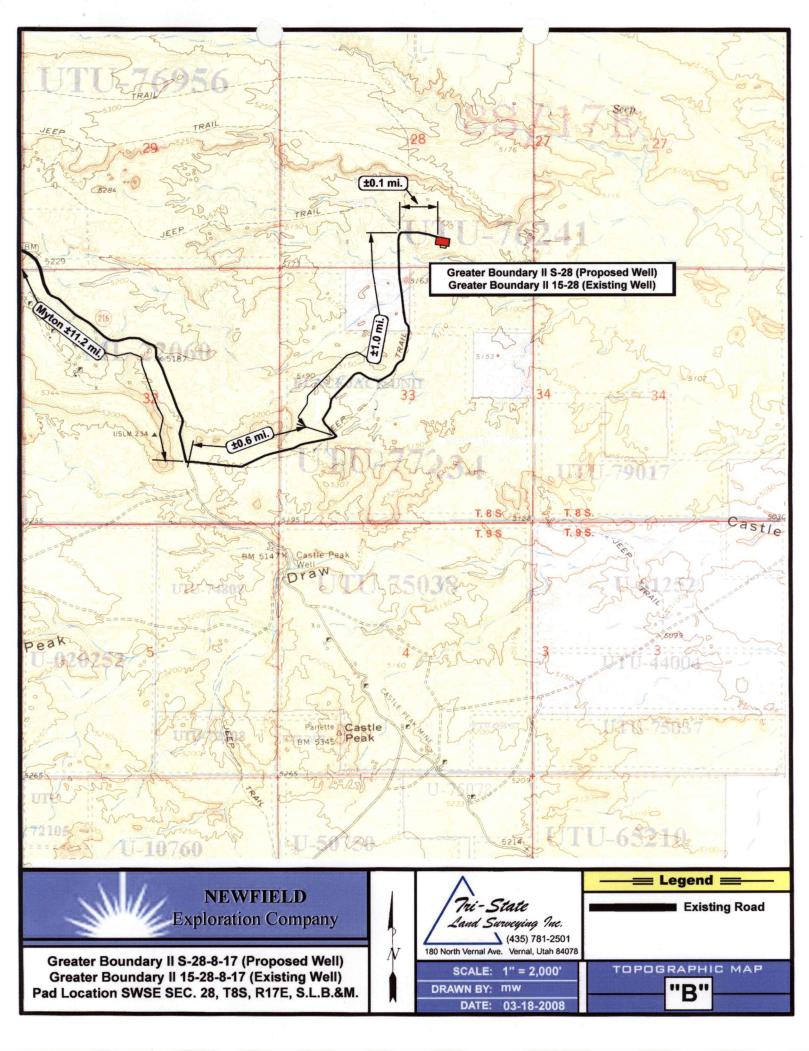
SW/SE Sec. 28 T8S, R17E

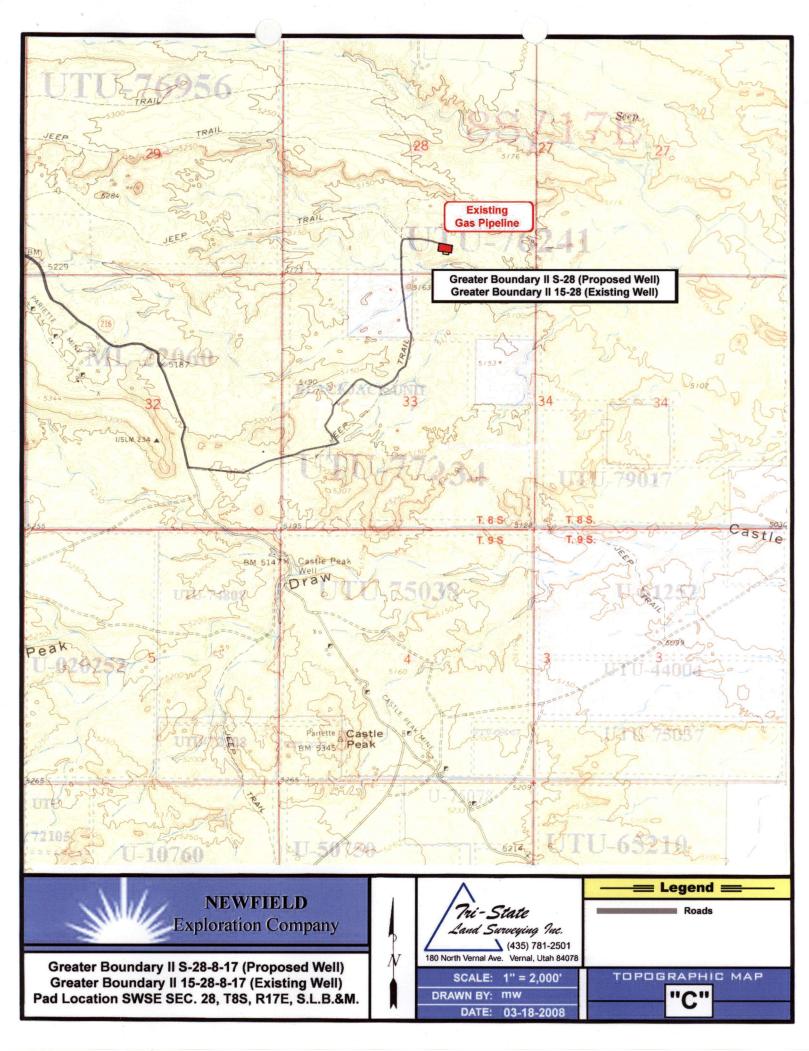
Duchesne County, Utah

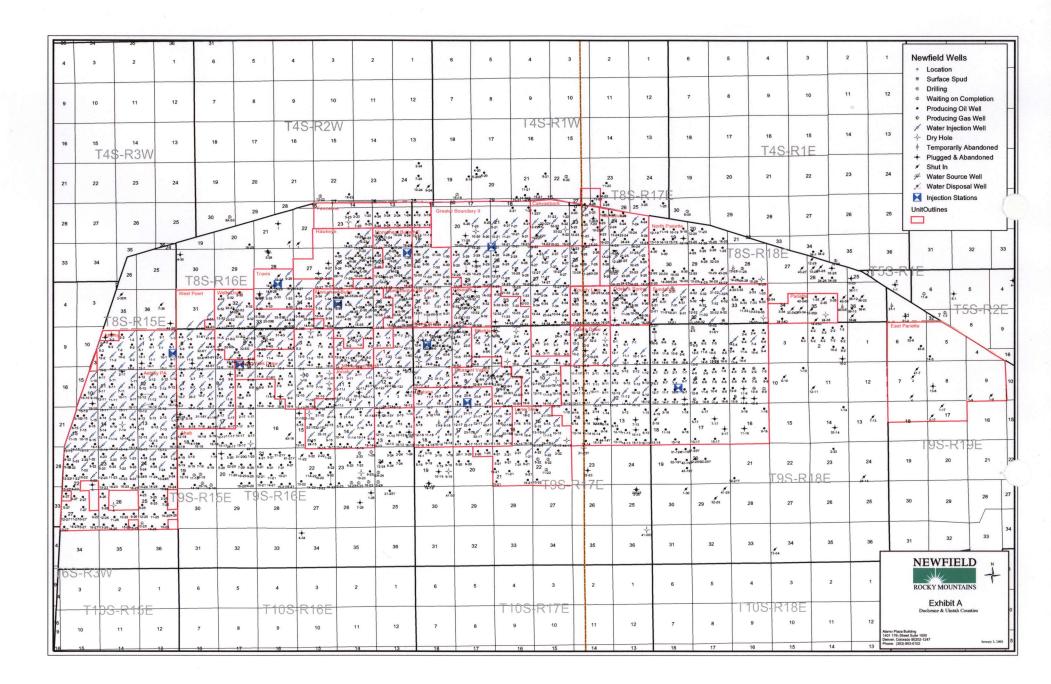
UTU-76241

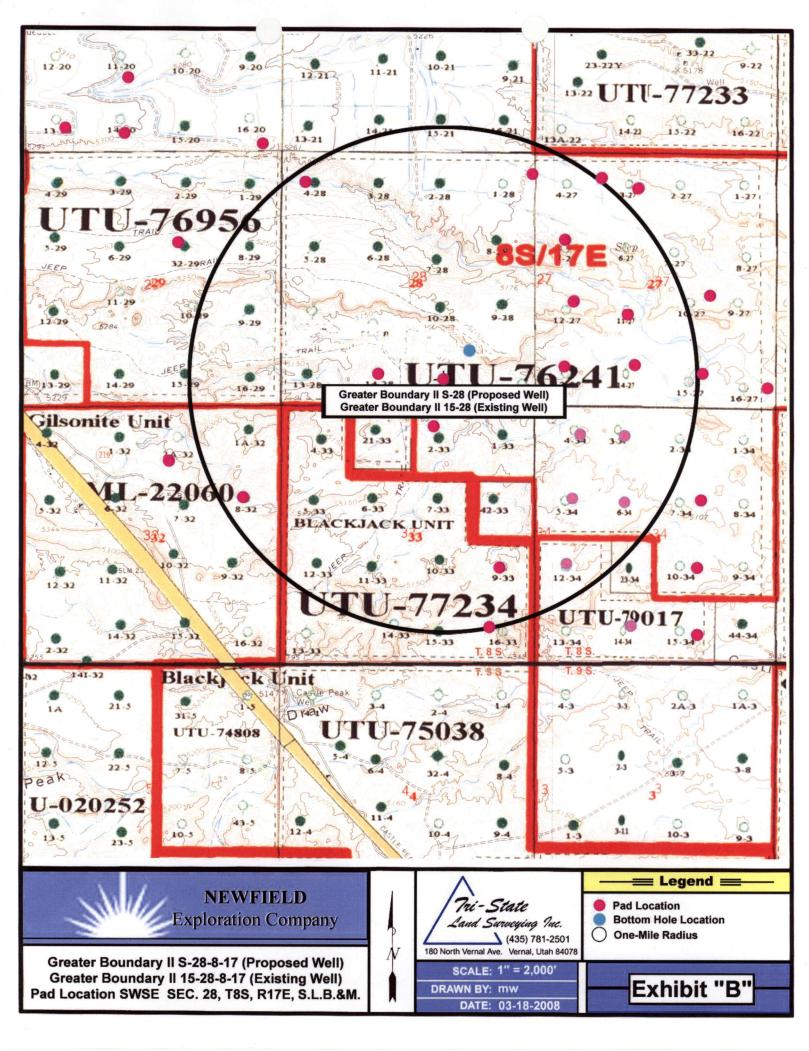














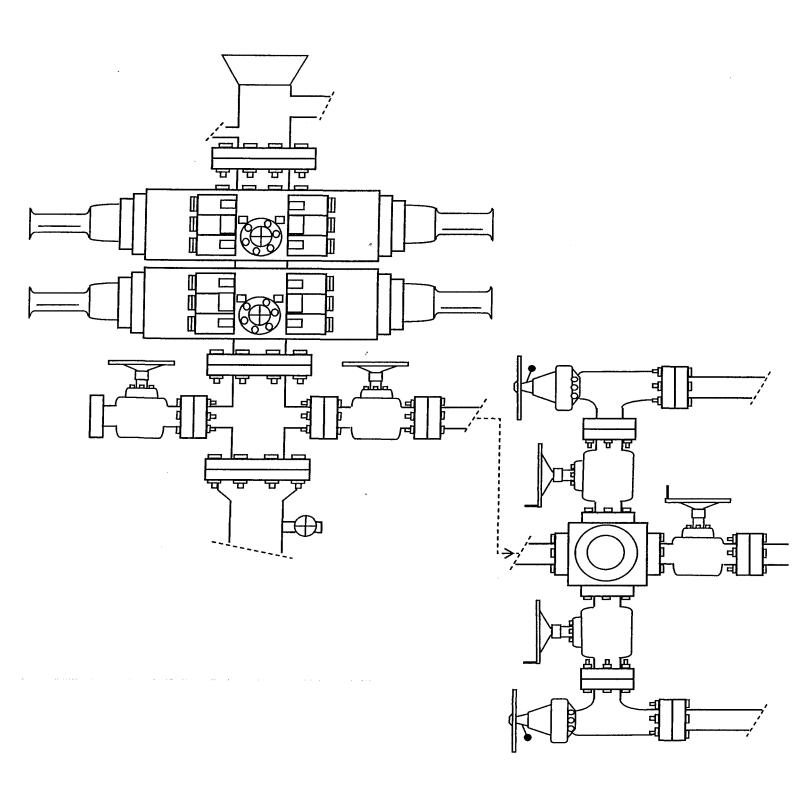
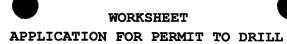
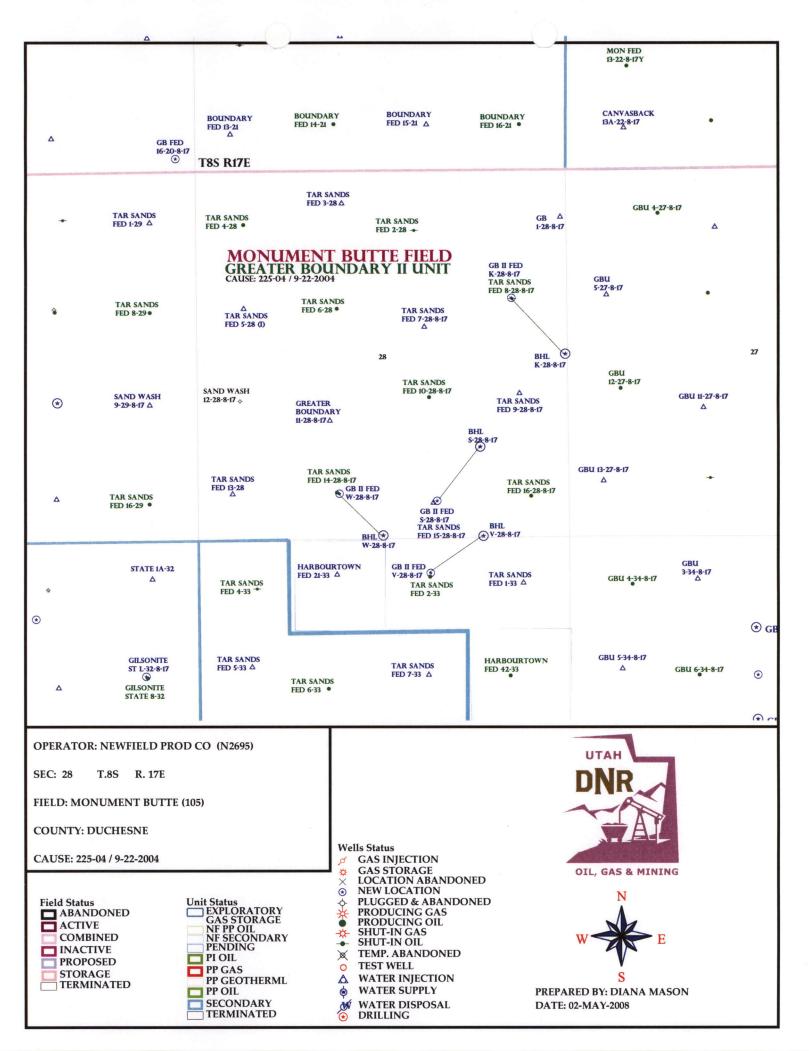


EXHIBIT C



APD RECEIVED: 04/29/2008	API NO. ASSIGNED: 43-013-33976
WELL NAME: GB II FED S-28-8-17 OPERATOR: NEWFIELD PRODUCTION (N2695) CONTACT: MANDIE CROZIER	PHONE NUMBER: 435-646-3721
PROPOSED LOCATION:	INSPECT LOCATN BY: / /
SWSE 28 080S 170E SURFACE: 0525 FSL 1882 FEL	Tech Review Initials Date
BOTTOM: 1290 FSL 1265 FEL	Engineering
COUNTY: DUCHESNE	Geology
LATITUDE: 40.08323 LONGITUDE: -110.0081 UTM SURF EASTINGS: 584571 NORTHINGS: 4437	256 Surface
FIELD NAME: MONUMENT BUTTE (105	
LEASE TYPE: 1 - Federal LEASE NUMBER: UTU-76241 SURFACE OWNER: 1 - Federal	PROPOSED FORMATION: GRRV COALBED METHANE WELL? NO
Plat Plat Bond: Fed[1] Ind[] Sta[] Fee[] (No. WYB0000493	LOCATION AND SITING: R649-2-3. Unit: GREATER BOUNDARY II (GR) R649-3-2. General Siting: 460 From Qtr/Qtr & 920' Between Wells R649-3-3. Exception Drilling Unit Board Cause No: 225-04 Eff Date: 9-22-2004 Siting: Suspends Great Street R649-3-11. Directional Drill
COMMENTS: Sop, Seperate	, Ele
STIPULATIONS:	provide



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office P.O. Box 45155 Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: 3160 (UT-922)

May 2, 2008

Memorandum

To:

Assistant District Manager Minerals, Vernal District

From:

Michael Coulthard, Petroleum Engineer

Subject:

2008 Plan of Development Greater Boundary

Unit, Duchesne County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following well is planned for calendar year 2008 within the Greater Boundary Unit, Duchesne County, Utah.

API#

WELL NAME

LOCATION

(Proposed PZ Green River)

43-013-33976 GB II Fed S-28-8-17 Sec 28 T08S R17E 0525 FSL 1882 FEL BHL Sec 28 T08S R17E 1290 FSL 1265 FEL

We have no objections to permitting the well so long as the unit operator receives an exception to the locating and siting requirements of the State of Utah (R649-3-2).

/s/ Michael L. Coulthard

bcc: File - Greater Boundary Unit Division of Oil Gas and Mining

Central Files Agr. Sec. Chron Fluid Chron

MCoulthard:mc:5-2-08



May 1, 2008

State of Utah, Division of Oil, Gas and Mining ATTN: Diana Mason PO Box 145801 Salt Lake City, UT 84114-5801

RE:

Directional Drilling

Greater Boundary II Federal S-28-8-17

Greater Boundary II Unit

UTU-77098X

Surface Hole:

T8S R17E, Section 28: SWSE

525' FSL 1882' FEL

Bottom Hole:

T8S R17E, Section 28

1290' FSL 1265' FEL

Duchesne County, Utah

poyann Eveland

Dear Ms. Mason;

Pursuant to the filing of Newfield Production Company's ("NPC") Application for Permit to Drill dated April 22, 2008, a copy of which is attached, for the above referenced well, and in accordance with Oil and Gas Conservation Rule R649-3-11, NPC hereby submits this letter as notice of our intention to directionally drill this well.

The surface hole location and bottom hole location of this well are both within the boundaries of the Greater Boundary II Federal Unit UTU-77098X. Newfield certifies that it is the Greater Boundary II Unit Operator and all lands within 460 feet of the entire directional well bore are within the Greater Boundary II Unit

NPC is permitting this well as a directional well in order to minimize surface disturbance. By directionally drilling from the referenced surface location, NPC will be able to utilize the existing roads and pipelines in this area.

NPC hereby requests our application for permit to drill be granted pursuant to R649-3-11. If you have any questions or require further information, please do not hesitate to contact the undersigned at 303-382-4444 or by email at reveland@newfield.com. Your consideration of this matter is greatly appreciated.

Sincerely,

Roxann Eveland Land Associate

MAY 0 5 2008

DIV. OF OIL, GAS & MINING

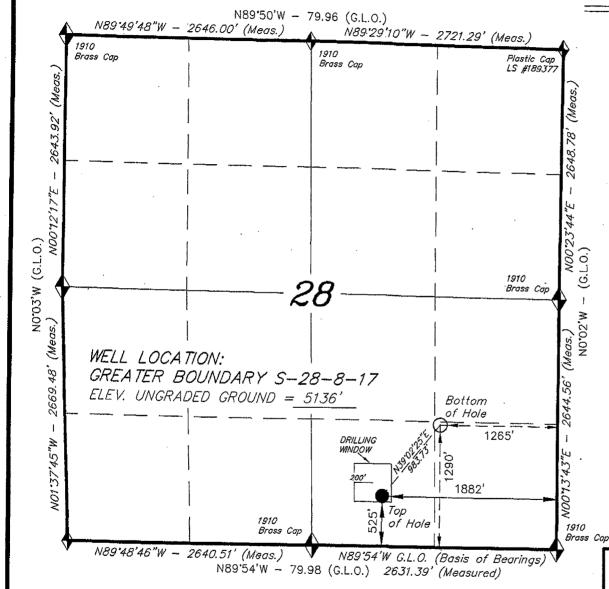
Form 3160-3 (September 2001)		FORM APPROV OMB No. 1004-0 Expires January 31	0136			
UNITED STATE. DEPARTMENT OF THE I			5. Lease Serial No.			
BUREAU OF LAND MANA			UTU-76241			
APPLICATION FOR PERMIT TO D	RII I OR REENTER		6. If Indian, Allottee or Tribe Name			
	THE ON NELWICK		N/A			
1a. Type of Work: DRILL REENTE	?R		7. If Unit or CA Agreement,	Name and No.		
	Greater Boundary II Unit					
lb. Type of Well: Soil Well Gas Well Other	Single Zone Mult	inle Zone	8. Lease Name and Well No	-		
2. Name of Operator	- Stigit Lotte - Marie	-pro zone	Greater Boundary II Fede	rai S-28-8-17		
Newfield Production Company			9, API Well No.			
3a. Address	3b. Phone No. (include area code)		10. Field and Pool, or Explora	tory		
Route #3 Box 3630, Myton UT 84052	(435) 646-3721		Monument Butte			
4. Location of Well (Report location clearly and in accordance with	any State requirements.*)	***	11. Sec., T., R., M., or Blk. an	d Survey or Area		
At surface SW/SE 525' FSL 1882' FEL	•					
At proposed prod. zone 1290' FSL 1265' FEL		Sec. 28, T8S R17E				
14. Distance in miles and direction from nearest town or post office*			12. County or Parish	13. State		
Approximatley 12.9 miles southeast of Myton, Utah	i	Duchesne UT				
 Distance from proposed* location to nearest property or lease line, ft. 	16. No. of Acres in lease	17. Spacing	g Unit dedicated to this well			
(Also to nearest drig. unit line, if any) Approx. 2610' fflse, 2610' ffunit	1880.00		20 Acres			
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. Approx. 1406'	19. Proposed Depth		IA Bond No. on file			
	6360'	ļ	/YB000493			
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will sta	rt*	23. Estimated duration			
5136' GL	3rd Quarter 2008		Approximately seven (7) days from spud to rig release.			
	24. Attachments		•			
The following, completed in accordance with the requirements of Onshor	e Oil and Gas Order No.1, shall be att	ached to this	form;			
 Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office). 	Item 20 above), 5. Operator certification	ation. specific info	s unless covered by an existing			
25. Signature	Name (Printed/Typed)		!Date			
The Condial working	Mandie Crozier		4/22/	Ď8		
Title Regulatory Specialist				**************************************		
Approved by (Signature)	Name (Printed/Typed)		Date			
	• •		1			
Title	Office					
Application approval does not warrant or certify the the applicant holds leg operations thereon. Conditions of approval, if any, are attached.	gal or equitable title to those rights in	the subject le	ase which would entitle the app	licant to conduct		
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a States any false, fictitious or fraudulent statements or representations as to	a crime for any person knowingly and any matter within its jurisdiction.	willfully to	make to any department or age	ncy of the United		
				~		

*(Instructions on reverse)

MAY 0 5 2008

DIV. OF OIL, GAS & MINING

T8S, R17E, S.L.B.&M.



GREATER BOUNDARY S-28-8-1

(Surface Location) NAD 83 LATITUDE = 40° 04' 59.26"

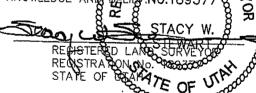
LONGITUDE == 110°00' 31.76"

NEWFIELD PRODUCTION COMPANY

WELL LOCATION, GREATER BOUNDARY S-28-8-17, LOCATED AS SHOWN IN THE SW 1/4 SE 1/4 OF SECTION 28, T8S, R17E, S.L.B.&M. DUCHESNE COUNTY, UTAH.



THIS IS TO CERTIFY THA PREPARED FROM FIELD NOTES OF ACTUS.
MADE BY ME OR UNDER AND SORRECT TO THE
MY KNOWLEDGE AND STREET NO.189377



TRI STATE LAND SURVEYING & CONSULTING

180 NORTH VERNAL AVE. - VERNAL, UTAH 84078 (435) 781 - 2501

DATE SURVEYED: 02-25-08	SURVEYED BY: T.H.
DATE DRAWN: 03-11-08	DRAWN BY: L.C.S.
REVISED:	SCALE: 1" = 1000'

SECTION CORNERS LOCATED

BASIS OF ELEV; U.S.G.S. 7-1/2 min QUAD (MYTON SE)





MICHAEL R. STYLER Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA Division Dirèctor

May 5, 2008

Newfield Production Company Rt. #3, Box 3630 Myton, UT 84052

Re:

Greater Boundary II Federal S-28-8-17 Well, Surface Location 525' FSL, 1882' FEL, SW SE, Sec. 28, T. 8 South, R. 17 East, Bottom Location 1290' FSL, 1265' FEL,

SE SE, Sec. 28, T. 8 South, R. 17 East, Duchesne County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann.§ 40-6-1 et seq., Utah Administrative Code R649-3-1 et seq., and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-013-33976.

Sincerely,

Gil Hunt

Associate Director

Xu7/ut

pab Enclosures

cc:

Duchesne County Assessor

Bureau of Land Management, Vernal Office



Operator:	Newfield Production Company		
Well Name & Number	nber Greater Boundary II Federal S-28-8-17		
API Number:	43-013-33976		
Lease:	: <u>UTU-76241</u>		
Surface Location: SW SE Bottom Location: SE SE	Sec. 28 Sec. 28	T. <u>8 South</u> T. <u>8 South</u>	R. 17 East R. 17 East

Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

2. Notification Requirements

Notify the Division within 24 hours of spudding the well.

• Contact Carol Daniels at (801) 538-5284

Notify the Division prior to commencing operations to plug and abandon the well.

Contact Dustin Doucet at (801) 538-5281 (801) 733-0983 home

3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

- 4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.
- 5. In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

PECEIVED

APR 2 5 7.33

Form 3160-3 (September 2001)

BLM VERNAL, UTAH

UNITED STATES
DEPARTMENT OF THE INTERIORBUREAU OF LAND MANAGEMENT

FORM APPROVED OMB No. 1004-0136 Expires January 31, 2004

UTU-76241

Tribe Name

Expires January 31, 200

5. Lease Serial No.

APPLICATION FOR PERMIT TO DRILL OR REENTER	6.	If Indian, A	llottee or
APPLICATION FOR PERMIT TO DRILL OR REENTER	l'		

, , , , , , , , , , , , , , , , , , ,			N/A	
la. Type of Work: DRILL REENTER		7. If Unit or CA Agreement, Name and No. Greater Boundary II Unit		
lb. Type of Well: A Oil Well Gas Well Other	Single Zone Multip	ole Zone	Lease Name and Well No. Greater Boundary II Federa	al S-28-8-17
Name of Operator Newfield Production Company			9. API Well No. 43-513-3.	3976
3a. Address Route #3 Box 3630, Myton UT 84052	3b. Phone No. (include area code) (435) 646-3721	,	10. Field and Pool, or Explorat Monument Butte	ory
4. Location of Well (Report location clearly and in accordance with At surface SW/SE 525' FSL 1882' FEL At proposed prod. zone SE/SE 290' FSL 1265' FEL	any State requirements.*)		11. Sec., T., R., M., or Blk. and Sec. 28, T8S R17E	Survey or Area
 Distance in miles and direction from nearest town or post office* Approximatley 12.9 miles southeast of Myton, Utah 			12. County or Parish Duchesne	13. State
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) Approx. 2610' f/lse, 2610' f/unit	16. No. of Acres in lease	17. Spacin	g Unit dedicated to this well 20 Acres	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. Approx. 1406'	19. Proposed Depth 6360'		BIA Bond No. on file /YB000493	:
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5136' GL 22. Approximate date work will 3rd Quarter 2008		rt*	23. Estimated duration Approximately seven (7) days from spud to	o rig release.
	24. Attachments			

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

- 1. Well plat certified by a registered surveyor.
- 2. A Drilling Plan.
- 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification.
- Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature	Name (Printed/Typed)	Date
Il tandio Crosus	Mandie Crozier	4/22/08
Title		
Regulatory Specialist		t
Approved by (Signature)	Name (Printed/Typed)	PJAN 16 200
As Kouch	JERRY KENZUA	JAN 10 ZOU
Title Assistant Field Manager	Office VERNAL FIELD OFFICE	
1 while O'A Harris Daggerings	Veilitha I Habe VI I IV	

Application approval does not warrant or certify the the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*(Instructions on reverse)

FEB 0 4 2009

DIV. OF OIL, GAS & MINING

NOS 03:21-2008 AFMSS# 08PP06814

CONDITIONS OF APPROVAL ATTACHEC

NOTICE OF APPROVAL



UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VERNAL FIELD OFFICE

VERNAL FIELD OFFICE VERNAL, UT 84078

(435) 781-4400



CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company:

Newfield Production Company

43-013-33976

Location:

SWSE, Sec.28,T8S,R17E

Well No: API No: Greater Boundary II Federal S-28-8-17

Lease No: Agreement: UTU-76241 Greater Boundary II Unit

Title	Name	Office Phone Number	Cell Phone Number
Petroleum Engineer:	Matt Baker	(435) 781-4490	(435) 828-4470
Petroleum Engineer:	Michael Lee	(435) 781-4432	(435) 828-7875
Petroleum Engineer:	Ryan Angus	(435) 781-4430	(435) 828-7368
Supervisory Petroleum Technician:	Jamie Sparger	(435) 781-4502	(435) 828-3913
Supervisory NRS:	Karl Wright	(435) 781-4484	
NRS/Enviro Scientist:	Holly Villa	(435) 781-4404	(435) 828-3544
NRS/Enviro Scientist:	James Hereford	(435) 781-3412	(435) 828-3546
NRS/Enviro Scientist:	Chuck Macdonald	(435) 781-4441	(435) 828-7481
NRS/Enviro Scientist:	Dan Emmett	(435) 781-3414	(435) 828-4029
NRS/Enviro Scientist:	Paul Percival	(435) 781-4493	(435) 828-7381
NRS/Enviro Scientist:	Anna Figueroa	(435) 781-3407	(435) 828-3548
NRS/Enviro Scientist:	Verlyn Pindell	(435) 781-3402	(435) 828-3547
NRS/Enviro Scientist:	Nathan Packer	(435) 781-3405	(435) 828-3545
NRS/Enviro Scientist:	David Gordon	(435) 781-4424	
NRS/Enviro Scientist:	Christine Cimiluca	(435) 781-4475	

Fax: (435) 781-3420

A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR FIELD REPRESENTATIVE TO INSURE COMPLIANCE

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.

NOTIFICATION REQUIREMENTS

Location Construction (Notify Environmental Scientist)	-	Forty-Eight (48) hours prior to construction of location and access roads.
Location Completion (Notify Environmental Scientist)	-	Prior to moving on the drilling rig.
Spud Notice (Notify Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings.
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify Petroleum Engineer)	-	Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

SURFACE USE PROGRAM CONDITIONS OF APPROVAL (COAs)

- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop work and contact the Authorized Officer (AO). A determination will be made by the AO as to what mitigation may be necessary for the discovered paleontologic material before construction can continue.

SITE SPECIFIC CONDITIONS OF APPROVAL

NONE

DOWNHOLE PROGRAM CONDITIONS OF APPROVAL (COAs)

SITE SPECIFIC DOWNHOLE COAs:

NONE

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- <u>Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.</u>
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times.
 Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the
 daily drilling report. Components shall be operated and tested as required by Onshore Oil &
 Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be
 performed by a test pump with a chart recorder and <u>NOT</u> by the rig pumps. Test shall be
 reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- Cement baskets shall not be run on surface casing.
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.

- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM,
 Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum
 Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the <u>top of cement</u> and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- Please submit an electronic copy of all other logs run on this well in LAS format to UT_VN_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- In accordance with 43 CFR 3162.4-3, this well shall be reported on the "Monthly Report of Operations" (Oil and Gas Operations Report ((OGOR)) starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report shall be filed in duplicate, directly with the Minerals Management Service, P.O. Box 17110, Denver, Colorado 80217-0110, or call 1-800-525-7922 (303) 231-3650 for reporting information.
- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
 - o Operator name, address, and telephone number.
 - Well name and number.
 - o Well location (1/41/4, Sec., Twn, Rng, and P.M.).
 - Date well was placed in a producing status (date of first production for which royalty will be paid).
 - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
 - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
 - o Unit agreement and/or participating area name and number, if applicable.
 - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or

data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field
 Office Petroleum Engineers will be provided with a date and time for the initial meter calibration
 and all future meter proving schedules. A copy of the meter calibration reports shall be
 submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API
 standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All
 measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted
 to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs
 first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be
 adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively
 sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover
 equipment shall be removed from a well to be placed in a suspended status without prior
 approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30
 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given
 before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

	STATE OF UTAH		FORM 9				
	DEPARTMENT OF NATURAL RESOURCE: DIVISION OF OIL, GAS, AND MIN		5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-76241				
SUNDRY NOTICES AND REPORTS ON WELLS 6. IF INDIAN, ALLOTTEE OR TRIBE NAME:							
	sals to drill new wells, significantly deepen e gged wells, or to drill horizontal laterals. Us		7.UNIT or CA AGREEMENT NAME: GREATER BOUNDARY II (GR)				
1. TYPE OF WELL Oil Well			8. WELL NAME and NUMBER: GB II FED S-28-8-17				
2. NAME OF OPERATOR: NEWFIELD PRODUCTION COM	PANY		9. API NUMBER: 43013339760000				
3. ADDRESS OF OPERATOR: Rt 3 Box 3630 , Myton, UT, 84	435 646-4825 Ext	PHONE NUMBER:	9. FIELD and POOL or WILDCAT: MONUMENT BUTTE				
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0525 FSL 1882 FEL			COUNTY: DUCHESNE				
QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: SWSE Section: 28	P, RANGE, MERIDIAN: Township: 08.0S Range: 17.0E Meridian: S	5	STATE: UTAH				
11. CHE	CK APPROPRIATE BOXES TO INDICATI	E NATURE OF NOTICE, REPORT,	OR OTHER DATA				
TYPE OF SUBMISSION		TYPE OF ACTION					
	ACIDIZE	☐ ALTER CASING	CASING REPAIR				
NOTICE OF INTENT Approximate date work will start: 5/4/2009	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME				
3/ 1/ 2003	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE				
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION				
·	OPERATOR CHANGE	PLUG AND ABANDON	L PLUG BACK				
SPUD REPORT	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION				
Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON				
	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL				
DRILLING REPORT Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	✓ APD EXTENSION				
·	☐ WILDCAT WELL DETERMINATION	OTHER	OTHER:				
	ermission to extend the Permit year.	to Drill this well for one	Approved by the Utah Division of Oil, Gas and Mining ate: May 11, 2009 y:				
NAME (PLEASE PRINT)	PHONE NUMBER	TITLE					
Mandie Crozier	435 646-4825	Regulatory Tech					
SIGNATURE N/A		DATE 5/4/2009					



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43013339760000

API: 43013339760000 Well Name: GB II FED S-28-8-17

Location: 0525 FSL 1882 FEL QTR SWSE SEC 28 TWNP 080S RNG 170E MER S

Company Permit Issued to: NEWFIELD PRODUCTION COMPANY

Date Original Permit Issued: 5/5/2008

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the requ

informat uire revis	ion as submitted in the ion. Following is a che	previo cklist of	usly approved f some items re	application elated to the	to drill, re e application	mains valid and don, which should	oes not be verified.
	ted on private land, ha ed? Yes No	s the o	wnership chan	ged, if so, h	as the surf	ace agreement be	en
	any wells been drilled i requirements for this l				l which wo	uld affect the spa	icing or
	ere been any unit or o proposed well? 🧻 🐧			n place that	could affe	ct the permitting	or operatio
	here been any change the proposed location?			ncluding ow	nership, o	r rightof- way, wl	nich could
• Has th	e approved source of v	vater fo	r drilling chan	ged? 📗 Y	es 📵 No	•	
	here been any physica e in plans from what w						equire a
• Is bon	ding still in place, whic	ch covei	rs this propose	d well? 🌘	Yes 🗎	Approved b No Utah Division Oil, Gas and	on of
	Mandie Crozier		5/5/2009		.	. M 11 0	1000
Title:	Regulatory Tech Repres	enting:	NEWFIELD PRC	DUCTION CO	MPANY Da	(C. C.)	<u>.009</u>

Sig

	STATE OF UTAH		FORM 9				
	DEPARTMENT OF NATURAL RESOURCE: DIVISION OF OIL, GAS, AND MIN		5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-76241				
SUNDRY NOTICES AND REPORTS ON WELLS 6. IF INDIAN, ALLOTTEE OR TRIBE NAME:							
	sals to drill new wells, significantly deepen e gged wells, or to drill horizontal laterals. Us		7.UNIT or CA AGREEMENT NAME: GREATER BOUNDARY II (GR)				
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SPUD REPORT	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION				
Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON				
	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL				
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NAME (PLEASE PRINT)	PHONE NUMBER	TITLE					
Mandie Crozier	435 646-4825	Regulatory Tech					
SIGNATURE N/A		DATE 5/4/2009					



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43013339760000

API: 43013339760000 Well Name: GB II FED S-28-8-17

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	any wells been drilled i requirements for this l				l which wo	uld affect the spa	icing or
	ere been any unit or o proposed well? 🧻 🐧			n place that	could affe	ct the permitting	or operatio
	here been any change the proposed location?			ncluding ow	nership, o	r rightof- way, wl	nich could
• Has th	e approved source of v	vater fo	r drilling chan	ged? 📗 Y	es 📵 No	•	
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	Mandie Crozier		5/5/2009		.	. M 11 0	1000
Title:	Regulatory Tech Repres	enting:	NEWFIELD PRC	DUCTION CO	MPANY Da	(C. C.)	<u>.009</u>

Sig

Spud BLM - Vernal Field Office - Notification Form

Operat	tor <u>Newfield Exploration</u>		Rig
Name/	/# <u>Ross #29</u> Su	bmitted By Alvir	<u>1</u>
<u>Nielse</u>	n Phone Numl	oer <u>435-823-</u>	
7468			
Well N	lame/Number <u>Greater Boundary</u>	II Fed S-28-8-1	<u>L7</u>
	r <u>SW/SE</u> Section <u>28</u>	Township <u>8S</u>	Range
17E			
Lease	Serial Number <u>UTU-76241</u>		
ΔDT Ni	umber 43-013-		
33976			
3337 O	444.6		
Spud I	Notice – Spud is the initial spudo	ding of the well,	not drilling
out be	low a casing string.		
-	0.1. /T' C/0.C/0.0	0.00	
	Pate/Time <u>6/26/09</u>	9:00	$_{\scriptscriptstyle{\perp}}$ AM $oxed{oxed}$
PM			
Casino	ı – Please report time casing rur	າ starts, not cen	nenting
times.	, ,	,	3
\boxtimes S	Surface Casing		
	ntermediate Casing		
<u> </u>	Production Casing		
	iner		
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Г	Date/Time <u>6/26/09</u>	3:00	AM PM
	odic/ Time <u>0/20/03</u>	5.00	An ri
<u>BOPE</u>			i
II	nitial BOPE test at surface casing	g point	

	BOPE test at intermediate casing 30 day BOPE test Other	g point	
PM [Date/Time <u>6/26/09</u>	9:00	AM 🔀
	arks <u>Ross Rig # 29 spud the Gr</u> on 6/26/09 @ 9:00 AM & Run 8		
3:00		576 Casing on 6/	<u>20/09 @</u>
•			

STATE OF UTAH DIVISION OF OIL, GAS AND MINING **ENTITY ACTION FORM -FORM 6**

OPERATOR: NEWFIELD PRODUCTION COMPANY

ADDRESS: RT. 3 BOX 3630

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OPERATOR ACCT. NO.

N2695

CODE	ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	- ca	TSC	WELL	LOCATION RG	COUNTY	SPUD DATE	EFFECTIVE DATE
В	99999	12391	4301333976	GREATER BOUNDARY II S-28-8-17	SWSE	28		17E	DUCHESNE		10/20/00
WELL 1 CO		RV	4001000310	BHL=SE	· · · · · · · · · · · · · · · · · · ·	20	03	IIE	DOCUESNE	6/26/2009	14/20/09
ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	QQ	SC	LL LOCAT	TION RG	COUNTY	SPUD DATE	EFFECTIVE DATE
Α	99999	17328	4301333408	FEDERAL 3-28-9-16	NENW	28		16E	DUCHESNE	6/22/2009	6/30/09
	GRR	W									
ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME		SC	WELL.I	LOCATION	COUNTY	SPUD DATE	EPFECTIVE
									999411	DALE	
		I		leurone	<u> </u>		I	.1.	<u> </u>		A
ACTION CODE	CURRENT ENTITY NO.	NEW	API NUMBER	WELL NAME	QQ	1 00		LOCATION	AAUU7/	SPUD	EFFECTIVE
CODE	ENTIT NO.	ENTITY NO.			- QQ	SC	ΤP	RG	COUNTY	DATE	DATE
				L		<u> </u>		l			
ACTION	CURRENT	NEW	API NUMBER	WELL NAME		1 55		LOCATION		SPUD	EFFECTIVE
CODE	ΕΝΠΤΥ ΝΟ.	ENTITY NO.			<u> </u>	SC	TP	RG	COUNTY	DATE	DATE
WELL 5 CO	MMENTS:							<u></u>	<u> </u>		
		1	A A A A A A A A A A A A A A A A A A A								T
CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	QQ	sc	TP	LOCATION RG	COUNTY	SPUD DATE	EFFECTIVE DATE
WELL 5 CO	MMENTS:			,				·	,	1	
A- 10	DES (See instructions on bac ew entity for new well (single reli to existing entity (group or	well only)	-	RECEIVED		·····			MI	1	Jentri Parl
C - fro D - we	one existing entity to anothed from one existing entity to a correct t	ner existing entity a new entity		JUN 3 0 2009					Signature/ Production Clerk		06/30/09
				DOLOGO 040 0 40 0 40 10	40				\mathcal{V}		Date

DIV. OF OIL, GAS & MINING

FORM 3160-5 (August 2007)

UNITED S ES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM A	PPROVE
OMB No.	1004-013
 Expires: Ju	ıly 31,201

Lease Se	rial No.				_
USA UTU	J-76241				
TCT. 1'	A 11	. m 'i	NT.		

abandoned w	Y NOTICES AND REPOR this form for proposals to d rell. Use Form 3160-3 (APD		USA UTU-76241 6. If Indian, Allottee or Tribe Name.		
	TRIPLICATE - Other Ins	7. If Unit or CA GREATER BO	/Agreement, Name and/or DUNDARY II		
i. Type of Well Oil Well Gas Well	Other			9 Wall Name of	ad Nic
2. Name of Operator	- Outer			8. Well Name at GRTR BNDRY	
NEWFIELD PRODUCTION CO	OMPANY			9. API Well No.	
3a. Address Route 3 Box 3630	3	Bb. Phone (inc	lude are code)	4301333976	
Myton, UT 84052	~ ~ ~ · · · ·	435.646.3721			ol, or Exploratory Area
4. Location of Well (Footage, 525' FSL 1882' FEL	Sec., T., R., M., or Survey Description	on)		MONUMENT 11. County or Pa	
SWSE Section 28 T8S R17E				DUCHESNE,	UT
12. CHECK	(APPROPRIATE BOX(ES)	TO INIDICA	TE NATURE	OF NOTICE, OR O	THER DATA
TYPE OF SUBMISSION			TYPE OF AC	TION	
■ Notice of Intent Subsequent Report	Acidize Alter Casing Casing Repair	Deepen Fracture Treat New Construc	tion Re	oduction (Start/Resume)	Water Shut-Off Well Integrity Other
Final Abandonment	Change Plans Convert to Injector	Plug & Aband Plug Back		mporarily Abandon ater Disposal	Spud Notice
	On 7/8/09 cement with 160 sed 4 bbls cement to pit. WO		w/ 2% CaCL2	? + 1/4# sk Cello- Fi	ake Mixed @ 15.8 ppg >
I house out if , that the Concerns	true and				
correct (Printed/ Typed)	true and	Title	Foreman		
correct (Printed/ Typed) Alvin Nielsen	true and		Foreman		
correct (Printed/ Typed) Alvin Nielsen	true and	Drilling			
correct (Printed/ Typed) Alvin Nielsen	THIS SPACE FOR	Drilling Date 07/09/2	009	FFICE USE	
I hereby certify that the foregoing is correct (Printed/ Typed) Alvin Nielsen Signature Approved by Conditions of approval, if any, are attache	Muls THIS SPACE FOR	Drilling Date 07/09/2	009		ate

(Instructions on page 2)

JUL 1 3 2009

NEWFIELD PRODUCTION COMPANY - CASING & CEMENT REPORT

8 5/8" CASING SET AT 313.01

LAST CASING 8 5/8" SET AT 313.01	OPERATOR Newfield Exploration Company
DATUM12	WELL GRTR BNDRY II S-28-8-17
DATUM TO CUT OFF CASING 12	FIELD/PROSPECT Monument Butte
DATUM TO BRADENHEAD FLANGE 12	CONTRACTOR & RIG # Ross Rig # 21
TD DRILLER 310 LOGGER	
HOLE SIZE 12 1/4"	

LOG OF CASING	STRING:								
PIECES	OD	ITEM - M.	AKE - DESC	CRIPTION	WT/FT	GRD	THREAD	CONDT	LENGTH
1		92 csg hea	d					Α	0.95
8	8 5/8"	ST&C csg	(Shoe jt 37.	55)	24	J-55	STC	Α	301.16
1	8 5/8"	Guide shoe	9					Α	0.9
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		1					1		
CASING INVENT	ORY BAL	i	FEET	JTS	TOTAL LENGTH OF STRING				303.01
TOTAL LENGTH		G	303.01	8	LESS CUT	OFF PIEC	E		2
LESS NON CSG			1.85				CUT OFF CS	G	12
PLUS FULL JTS		~	0		CASING S				313.01
	TOTAL		301.16	8	7,				
TOTAL CSG. DE	L. (W/O TH	IRDS)	301.16	8	COMPA	RE			
Т	IMING]				
BEGIN RUN CSC	Э.	Spud	9:00 AM	6/26/2009	GOOD CIR	RC THRU J	OB	Yes	
CSG. IN HOLE			4:00 PM	6/26/2009	Bbls CMT	CIRC TO S	SURFACE	4	
BEGIN CIRC			9:47 AM	7/8/2009	RECIPRO	CATED PIF	No No		
BEGIN PUMP CI	МΤ		9:53 AM	7/8/2009					
BEGIN DSPL. CI	ИΤ		10:03 AM	7/8/2009	BUMPED	PLUG TO	540		
PLUG DOWN			10:10 AM	7/8/2009					

CEMENT USED)	CEMENT COMPANY- BJ								
STAGE	# SX	CEMENT TYPE & ADDITIVES								
1	1 160	G+2%CaCl+.25#/sk cello flake 15.8 ppg + 1.17 yeild								
	.,									
	<u> </u>									
		IER PLACEMENT SHOW MAKE & SPACING								
Middle first, top	second &	third for 3								

Alvin Nielsen

COMPANY REPRESENTATIVE

DATE 7/8/2009

FORM 3160-5 (August 2007)

Final Abandonment

DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

FORM APPROVE	ΞD
OMB No. 1004-01	37
Expires: July 31 20	116

SUNDRY NOTICES AND REPORTS ON WELLS

Convert to Injector

USA HTTL 76241

Lease Serial No.

Do not use t	OSA 010-70241									
	this form for proposals t vell. Use Form 3160-3 (A			6. If Indian, Allottee or Tribe Name.						
	SUBMIT IN TRIPLICATE - Other Instructions on page 2 Type of Well									
Oil Well Gas Well 2. Name of Operator	Other			8. Well Name and GRTR BNDRY						
NEWFIELD PRODUCTION CO 3a. Address Route 3 Box 3630 Myton, UT 84052	UMPANY	e code)	9. API Well No. 4301333976 10. Field and Pool, or Exploratory Area							
4. Location of Well (Footage, 525 ' FSL 1882' FEL	Sec., T., R., M., or Survey Desc	ription)		MONUMENT BUTTE 11. County or Parish, State						
SWSE Section 28 T8S R17E				DUCHESNE, I	UT					
12. CHECK	X APPROPRIATE BOX(ES) TO INIDICATE NA	ATURE OF N	OTICE, OR OT	THER DATA					
TYPE OF SUBMISSION	·	TYP	E OF ACTION	1						
☐ Notice of Intent ☑ Subsequent Report	Acidize Alter Casing Casing Repair	Deepen Fracture Treat New Construction	Producti Reclama Recomp		☐ Water Shut-Off ☐ Well Integrity ☑ Other					
Subsequent Report	Change Plans	Plug & Abandon	_ `	rily Abandon	Weekly Status Report					

13. Describe Proposed or Completed Operation: (Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Plug Back

Water Disposal

On 7/15/09 MIRU NDSI Rig # 2. Set all equipment. Pressure test Kelly, TIW, Choke manifold, & Bop's to 2,000 psi. Test 8.625 csgn to 1,500 psi. Vernal BLM field, & Roosevelt DOGM office was notifed of test. PU BHA and tag cement @ 287'. Drill out cement & shoe. Drill a 7.875 hole with fresh water to a depth of 6,418'& a TVD of 6283. Lay down drill string & BHA. Open hole log w/ Dig/SP/GR log's TD to surface. PU & TIH with Guide shoe, shoe jt, float collar, 160 jt's of 5.5 J-55, 15.5# csgn. Set @ 6400.30' / KB. Cement with 290 sks cement mixed @ 11.0 ppg & 3.54 yld. Then 400 sks cement mixed @ 14.4 ppg & 1.24 yld. With 43 bbls cement returned to pit. Nipple down Bop's. Drop slips @82,000 #'s tension. Release rig 4:30 PM 7/21/09

> RECEIVED AUG 0 4 2009

DIV. OF OIL, GAS & MINING

I hereby certify that the foregoing is true and correct (Printed/ Typed)	Title								
Alvin Nielsen	Drilling Foreman								
Signature Alie Mels	Date 07/22/2009								
THIS SPACE FOR FEDERAL OR STATE OFFICE USE									
Approved by	Title	Date							
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office	•							

NEWFIELD PRODUCTION COMPANY - CASING & CEMENT REPORT

			5 1/2"	CASING SET A	Τ	6400.3	_				
LAST CASING	8 5/8"	SET AT	313.01		OPERATO	R	Newfield	Exploration	Company		
DATUM		-			WELL GRTR BNDRY II S-28-8-17						
DATUM TO CUT	OFF CASI	NG	12				Monume				
DATUM TO BRA	DENHEAD	FLANGE	12		CONTRAC						
TD DRILLER	6418	LOGG	6405								
HOLE SIZE	7 7/8"	•	<u> </u>								
LOG OF CASING	STRING:										
PIECES	OD	ITEM - M	AKE - DES	CRIPTION	WT/FT	GRD	THREAD	CONDT	LENGTH		
1	5 1/2"	Landing jt	,		15.5	J-55	LTC	Α	14		
160	5 1/2"	LT&C casi	ng		15.5	J-55	LTC	Α	6347.32		
11	5 1/2"	Float colle						Α	0.6		
1	5 1/2"	LT&C casi	ng		15.5	J-55	LTC	Α	39.73		
1	5 1/2"	Guide shoe	9					Α	0.65		
			·						ļ		
CASING INVENT			FEET	JTS	TOTAL LEI				6402.3		
TOTAL LENGTH		G	6402.3		LESS CUT				14		
LESS NON CSG		_	15.25		⊣		CUT OFF CS	SG .	12		
PLUS FULL JTS			197.45	5	CASING SI	FIDEPIH			6,400.30		
	TOTAL		6584.5	5	վղ						
TOTAL CSG. DE		RDS)	6584.5	166	}} COMPA	RE					
	IMING				4						
BEGIN RUN CSC	3.	Spud	5:00 AM	7/21/2009	⊣ (OB		· · · · · · · · · · · · · · · · · · ·		
CSG. IN HOLE			8:30 AM	7/21/2009	-1		URFACE_				
BEGIN CIRC		· · · · · · · · · · · · · · · · · · ·	8:30 AM	7/21/2009		CATED PIP	Yes Yes				
BEGIN PUMP CI			10:19 AM		-		0.4				
BEGIN DSPL. CI	VI I		11:17 AM	7/21/2009		LUG TO _	2151				

11:43 AM

7/21/2009

PLUG DOWN

CEMENT USED			CEMENT COMPANY-	BJ	
STAGE	# SX		CEMENT TYPE & ADDIT	IVES	
1	290		PLII+3%KCL+5#CSE+0.5#CF+	2#KOL+.5SMS+FP+SF 11 ppg 3.5	54 yeild
2	400	50:	:50:2+3%KCL+0.5%EC-1+.25#C	F+.05#SF+.3SMS+FP-6L 14.4 pp	g 1.24 yeild
		-			
				, , , , , , , , , , , , , , , , , , , ,	
			,		
					
				4	
		·			
				and the second of the second o	
			·		
				A	
				and the second s	
CENTRALIZER 8	SCRATCH	IER PLACEMENT		SHOW MAKE & SPACIN	NG
			coller for a total of 20		
· · · · · · · · · · · · · · · · · · ·					
COMPANY REP	RESENTATI	VE Alvin Nie	lsen	DATE	7/21/2009

STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

	• · · · · · · · · · · · · · · · · · · ·
	5. LEASE DESIGNATION AND SERIAL NUMBER:
	USA UTU-76241
	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
.	7. UNIT or CA AGREEMENT NAME:
	GREATER BOUNDARY II
	8. WELL NAME and NUMBER:
	GRTR BNDRY II S-28-8-17

	DIVISION OF OIL, GAS AND MINING										
SUNDRY	NOTICES AND REPO	ORTS ON	WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:							
	ill new wells, significantly deepen existing wells be al laterals. Use APPLICATION FOR PERMIT TO			7. UNIT OF CA AGREEMENT NAME: GREATER BOUNDARY II							
I. TYPE OF WELL: OIL WELL	x GAS WELL ☐ OTHER	M		8. WELL NAME and NUMBER: GRTR BNDRY II S-28-8-17							
2. NAME OF OPERATOR:				9. API NUMBER:							
NEWFIELD PRODUCTION COM	IPANY			4301333976							
3. ADDRESS OF OPERATOR:			PHONE NUMBER	10. FIELD AND POOL, OR WILDCAT:							
Route 3 Box 3630 4. LOCATION OF WELL:	CITY Myton STATE UT	ZIP 84052	435.646.3721	MONUMENT BUTTE							
FOOTAGES AT SURFACE: 525 'FSL 1	882' FEL			COUNTY: DUCHESNE							
OTR/OTR. SECTION. TOWNSHIP, RANGE,	MERIDIAN: SWSE, 28, T8S, R17E			STATE: UT							
CHECK APPROI	PRIATE BOXES TO INDICATI	E NATURE (OF NOTICE, REPO	ORT, OR OTHER DATA							
TYPE OF SUBMISSION											
	ACIDIZE	DEEPEN	PE OF ACTION	REPERFORATE CURRENT FORMATION							
NOTICE OF INTENT (Submit in Duplicate)	ALTER CASING	=	PDF A T	=							
(Submit in Duplicate)	I	FRACTURE T		SIDETRACK TO REPAIR WELL							
Approximate date work will	CASING REPAIR	NEW CONST	RUCTION	TEMPORARITLY ABANDON							
	CHANGE TO PREVIOUS PLANS	OPERATOR (CHANGE	TUBING REPAIR							
	CHANGE TUBING	PLUG AND A	BANDON	VENT OR FLAIR							
■ SUBSEOUENT REPORT	CHANGE WELL NAME	PLUG BACK		WATER DISPOSAL							
(Submit Original Form Only)	CHANGE WELL STATUS	PRODUCTIO	N (START/STOP)	WATER SHUT-OFF							
Date of Work Completion:	COMMINGLE PRODUCING FORMATIONS	RECLAMATI	ON OF WELL SITE	OTHER: - Weekly Status Report							
09/08/2009	CONVERT WELL TYPE	RECOMPLET	E - DIFFERENT FORMATION								
The above subject well wa	s completed on 08/12/09, attached i	s a daily comp	letion status report.								
NAME (PLEASE PRINT) Jenter Park SIGNATURE This space for State use only)		·	Production Clerk DATE 09/08/2009								
1 / /											

RECEIVED

SEP 0 9 2009

Daily Activity Report

Format For Sundry GRTR BNDRY II S-28-8-17 6/1/2009 To 10/30/2009

8/3/2009 Day: 1

Completion

Rigless on 8/3/2009 - CBL/Perforate 1st stage. - Instal frac head & Cameron BOP's. RU Hot Oiler truck & test casing, blind rams, frac head & casing valves to 4500 psi. RU Perforators LLC. WLT w/ mast & run CBL under pressure. WLTD @ 6302' & cement top @ 90'. Perforate CP3 sds @ 6091-94', 6058-60', CP2 sds @ 6021-23', 5979-80', CP1 sds @ 5845-48' w/ 3-1/8" Slick Guns (19 gram, .49"EH, 120°) w/ 3 spf for total of 36 shots. RD WLT. SIFN w/ 151 bbls EWTR.

Daily Cost: \$0

Cumulative Cost: \$12,762

8/6/2009 Day: 2 Completion

Rigless on 8/6/2009 - Frac well. Flow well back. - Stage #2: RU Perforators LLC. WLT, crane & lubricator. RIH w/ Weatherford (6K) composite flow through frac plug & 3', 7' perf guns. Set plug @ 5905'. Perforate LODC sds @ 5845-48', 5818-25' w/ 3-1/8" Port Guns (11g, .37"EH, 120°) w/ 3 spf for total of 30 shots. RU BJ & frac w/ 15,076#'s of sand in 299 bbls of fluid. Open well w/ 1302 psi on casing. Perfs broke down @ 1820 psi back to 1827 psi w/ 3 bbls @ 4 bpm. ISIP was 1734 w/.73FG. 1 min was 1566. 4 min was 1465. Pump 30 gals of Techni Hib chemical @ 4% by volume. Treated @ ave pressure of 2457 w/ ave rate of 26 bpm w/ 6 ppg sand. Spot 12 bbls of 15% HCL in flush for next stage. ISIP was 2328 w/.83FG. 5 min was 2245. 10 min was 2174. 15 min was 2152. 1148 Bbls EWTR. Leave pressure on well. See stage #3. - Stage #3: RU WLT. RIH w/ frac plug & 3', 2, 2', 3' perf guns. Set plug @ 5640'. Perforate A1 sds @ 5545-48', B2 sds @ 5453-56', 5421-23', 5396-98' w/ 3 spf for total of 30 shots. RU BJ & frac w/ 30,292#'s of sand in 413 bbls of fluid. Open well w/ 2006 psi on casing. Perfs broke down @ 2942 psi back to 1932 psi w/ 3 bbls @ 4 bpm. Pressure to low to stop. Pump 30 gals of Techni Hib chemical @ 4% by volume. Treated @ ave pressure of 3107 w/ ave rate of 41 bpm w/ 6 ppg sand. Spot 12 bbls of 15% HCL in flush for next stage. ISIP was 1893 w/.78FG. 5 min was 1759. 10 min was 1692. 15 min was 1664. 1561 Bbls EWTR. Leave pressure on well. See stage #4. - Stage #1: RU BJ Services "Ram Head" frac flange. RU BJ & frac CP sds down casing w/ 85,005#'s of sand in 849 bbls of fluid. Open well w/ 0 psi on casing. Perfs broke down @ 3778 psi back to 3300 psi w/ 5 bbls @ 3 bpm. Pump 30 gals of Techni Hib chemical @ 4% by volume @ 7 bpm @ 2450 psi. ISIP was 1413 w/.67FG, 15 min was 944 psi. 30 min was 875. 45 min was 821. 60 min was 786. Treated @ ave pressure of 3124 w/ ave rate of 41 bpm w/ 6 ppg sand. Spot 12 bbls of 15% HCL in flush for next stage. ISIP was 1755 w/.73FG. 5 min was 1621. 10 min was 1525. 15 min was 1468. 849 Bbls EWTR. Leave pressure on well. See stage #2. - Stage #4: RU WLT. RIH w/ frac plug & 10' perf gun. Set plug @ 5310'. Perforate C sds @ 5208-18' w/ 3 spf for total of 30 shots. RU BJ & frac w/ 42,097#'s of sand in 426 bbls of fluid. Open well w/ 1415 psi on casing. Perfs broke down @ 1666 psi back to 1624 psi w/ 3 bbls @ 4 bpm. Pressure to low to shut down. Pump 30 gals of Techni Hib chemical @ 4% by volume. Treated @ ave pressure of 2118 w/ ave rate of 26 bpm w/ 8 ppg sand. ISIP was 2613 w/.94FG. 5 min was 1772. 10 min was 1556. 15 min was 1523. 1987 Bbls EWTR. RD BJ & WLT. Flow well back. Well flowed for 5 hours & turned to oil w/ 800 bbls rec'd (2000#'s of sand). SIFN w/ 1187 bbls EWTR.

Daily Cost: \$0

Cumulative Cost: \$81,561

8/7/2009 Day: 3

Completion

Nabors #823 on 8/7/2009 - MIRUSU. Drlg plugs. - MIRUSU. Open well w/ 400 psi on casing. RU Perforators LLC WLT w/ Lubricator. RIH w/ 5-1/2" Weatherford (6K) composite solid plug. Set plug @ 5110'. RD WLT. RU 4-3/4" used Chomp mill & x-over sub. Tally pickup & TIH w/ new J-55, 2-7/8" 6.5# tbg to tag plug @ 5110'. RU swivel, pump & tanks. Drlg out plug in 13 min. TIH w/ tbg to tag plug @ 5310'. Drlg out plug #1. TIH w/ tbg. Leave EOT @ 5320'. 1100 bbls EWTR. SIFN.

Daily Cost: \$0

Cumulative Cost: \$92,158

8/11/2009 Day: 4

Completion

Nabors #823 on 8/11/2009 - Drill out plugs & swab. - Check pressure on well, 100 psi csg & 0 psi tbg. Tag plug @ 5640'. Drill out plug in 30 min. TIH & tag plug @ 5905'. Drill out plug in 35 min. TIH & tag fill 6300', clean out to PBTD @ 6363'. Circulate well clean. RD power swivel. TOOH w/ 4- jts tbg. RU swab equipment. Made 14 swab runs w/ SFL @ surface & EFL @ 400'. Recovered 140 bbls ending w/ trace of oil & no show of sand. RD swab equipment. TIH w/ tbg & tag PBTD @ 6363' (no new fill). Circulate well clean. LD 6- jts tbg not needed for production. TOOH w/ 134- jts tbg. SWIFN. -

Daily Cost: \$0

Cumulative Cost: \$97,790

8/12/2009 Day: 5

Completion

Nabors #823 on 8/12/2009 - TIH w/ production tbg & rods, PWOP. - TOOH w/ 61- jts 2 7/8" tbg, LD bit & bit sub. TIH w/ production tbg as follows: 2 7/8" NC, 2- jts 2 7/8" J-55 6.5# 8rd EUE tbg, SN, 2- jts 2 7/8" tbg, TA, 191- jts 2 7/8" tbg. RD rig floor. ND BOPs. Set TA @ 6041' w/ 18,000# tension. NU wellhead. X-over for rods. Flush tbg w/ 60 BW. PU & prime Central Hydraulic 2 1/2" X 1 3/4" X 20' X 24' RHAC rod pump. PU rods as follows: 4- 1 1/2" weight rods, 239- 7/8" guided rods, 1- 6',4' X 7/8" pony rods & 1 1/2" X 30' polished rod. RU pumping unit. W/ tbg full, stoke test pump w/ unit to 800 psi. RDMOSU. PWOP @ 4:30 pm w/ 144" SL & 4 SPM. 1100 BWTR. **Finalized**

Daily Cost: \$0

Cumulative Cost: \$172,446

Pertinent Files: Go to File List

Form 3160-4 (August 2007)

*(See instructions and spaces for additional data on page 2)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB NO. 1004-0137 Expires: July 31, 2010

				BUK	EAU OF	LAND MA	NAGE	MENT						Expires: Ju	ly 31, 2010
	٧	VELL	СОМ	PLETI	ON OR	RECOMPL	ETION	REPORT	AND L	OG		1	ease U-76	Serial No.	
la. Type of	f Well	.n. 17	Oil We		Gas Well	Dry Deepen	Other	от П п	ec n	· · · · · · · · · · · · · · · · · · ·				an, Allottee or	Tribe Name
o. Type o	Completic)11. 18.	Other:	cn —	work Over	Deepen L	Plug B	заск 🗀 Di	ii. Kesvr.,				Jnit o	r CA Agreemer	nt Name and No.
2 Name of	f Omorotor		-									GR	EAT	ER BOUNDA	RY II
2. Name of NEWFIEL	D EXPLO	DRATI	ои со	MPANY	(Name and Well ERAL S-28-8	
Address		IST SH	ITE 1000	DENI/ED	CO 80202				No. (includ	de area cod	le)			/ell No.	
4. Location						dance with Fede	ral reauir	(435)646	5-3/21					33976 and Pool or Ex	nloratory
							-	· · · · · · · · · · · · · · · · · · ·				МО	NUN	MENT BUTTE	
At surfa	ce 525' F	SL & 1	882' FE	EL (SW/	SE) SEC.	28, T8S, R17	Ε					11.	Sec.,	T., R., M., on E	Block and
								- 0	T - M	01	n –	- 1	Surve	SEC.	28, T8S, R17E
At top pr	od. interval	l reporte	ed below	BHL:	1457' FSL	& 1119' FEL ((NE/SE)	5-28	108.	5 17/		12.	Coun	ty or Parish	13. State
At total d	lepth 641	8'										DUC	CHE	SNE	UT
14. Date St	oudded				T.D. Reache	ed .	1	16. Date Com	pleted 08	/12/2009				tions (DF, RK	B, RT, GL)*
06/26/200 18. Total D		D 64		07/21/2		ug Back T.D.:	MD 63		₹ Re	ady to Proc 0. Depth E			6' GI MD	L 5148' KB	
	T	/D 62	83'			•	TVD 6	a a9'		-		_	TVD		
21. Type E	Electric & O	ther Me	chanical	Logs Run	(Submit co	ny of each)		-	22	2. Was we Was DS				☐ Yes (Submit ☐ Yes (Submit	• •
						EUTRON,GR,	,CALIPE	R, CMT BC	DND					✓ Yes (Submit	
23. Casing		1				1	Sta	ige Cementer	No of	Sks. &	1 8	Slurry Vol.			
Hole Size	Size/G		Wt. (#/1	tt.)	Top (MD)	Bottom (MI	D) 3	Depth		Cement		(BBL)		ement Top*	Amount Pulled
12-1/4"	8-5/8"		24#			310'			160 CL/						
7-7/8"	5-1/2" (J-55 	15.5#			6400'	- 		290 PRI				90'		
			·····	_					400 50/	50 POZ					
									 		-				
							·								
	Record	·													
Size 2-7/8"		Set (M 2) 6172		acker Der @ 6041		Size	Dep	th Set (MD)	Packer De	pth (MD)		Size	D	epth Set (MD)	Packer Depth (MD)
25. Produci			2 117	<u>W</u> 004 i			26.	Perforation	Record			<u>.</u>		·····	<u> </u>
	Formatio				Гор	Bottom		Perforated In			Size	No. I	Ioles		Perf. Status
A) GREEN								3)CP2)(CP1				3		36	
OITEL	N RIVER							OC) 5845-48				3		30	
D) GREEN								& (B2) see 208-5218	below	.37"		3		30	
27. Acid, F		atment.	Cement	Squeeze	e, etc.](0 5.	200-3218		1.37		3		30	
	Depth Inter			7	,				Amount and	d Type of M	Materi	ial			
5845-6094		-				n casing w/ 8			849 bbls (of fluid.					
5818-5848 5396-5548						s of sand in 29									
5208-5218						s of sand in 4° s of sand in 42								**	
28. Product		al A		riac w	42,091#	S OI Sano in 42	20 0015 0	or fluid.							
Date First	Test Date	Hours			Oil		Water	Oil Grav	-	Gas	- 1	Production M			- Walter
Produced		Tested	Pro	duction	BBL	1	BBL	Corr. Al	PI	Gravity		Central Hyd rod pump	traul	ic 2 1/2" X 1	3/4" X 20' X 24' RHAC
	08/16/08				92	0	35					Too pump			
Choke Size	Tbg. Press. Flwg.	Press.	24 : Rat		Oil BBL		Water BBL	Gas/Oil Ratio		Well Stati		G			
	SI		-	-						1.11000	11 W	~			
28a. Produc	tion - Inter	val B			<u> </u>					l					
Date First	Test Date	Hours	Tes	ŧ	Oil	1 1	Water	Oil Grav		Gas	μ	Production Me	ethod	l	
Produced		Tested	Pro	duction	BBL	MCF	BBL	Cort. Al	' I	Gravity					
Choke	Tbg. Press.	Cea	043	U _r	0:1	Coo	W7-4-		•••	711 11 0					
Size	Flwg.	esg. Press.	24 I Rate		Oil BBL		Water BBL	Gas/Oil Ratio		Well Statu	18			RE(CEIVED
	SI	ſ			1	1 · · · · · · · · · · · · · · · · · · ·		1		1					

					<u></u>					
Date First	luction - Inte Test Date	Hours	Test	Oil	Gas	Water	Oil Gravity	Gas	Production Method	
Produced		Tested	Production	BBL	MCF	BBL	Corr. API	Gravity	, induction Memor	
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status		
28c. Prod	uction - Inte	rval D		<u> </u>	L				Marana v v v	
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method	
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status		
29. Dispos	sition of Gas	S (Solid, us	sed for fuel, ve	nted, etc.,						
USED FOR	R FUEL									
30. Summ	nary of Poro	us Zones	(Include Aqui	fers):		31. Formati	on (Log) Markers	**************************************		
Show a including recover	ng depth int	zones of perval teste	porosity and co	ontents th	ereof: Cored ol open, flow	intervals and all ing and shut-in p	drill-stem tests, pressures and	GEOLOG	ICAL MARKERS	
Forn	Formation Top Bottom				Des	criptions, Conte	nts, etc.	,	Name	Top Meas. Depth
					, y way survive out			GARDEN GU GARDEN GU		4015' 4214'
								GARDEN GU POINT 3	LCH 2	4338' 4616'
								X MRKR Y MRKR		4853' 4887'
								DOUGALS CI BI CARBONA		5023' 5276'
								B LIMESTON CASTLE PEA		5462' 5897'
								BASAL CARB	ONATE H (LOGGERS)	6331' 6405'
20 4334		<i>(</i> : 1.1.							The state of the s	
Stage 1: spf for tot	Perforate tal of 36 sh	CP3 sds		', 6058-6			5979-80', CP1 s 5396-98' w/ 3 spf	_	' w/ 3-1/8" Slick Guns (19 gr shots.	ram, .49"EH, 120°) w/ 3
33. Indicat	e which item	ns have be	en attached by	placing	check in the	appropriate box	(es:			
			1 full set req'd	•		Geologic Report	☐ DST Re	eport	☑ Directional Survey	
34. I hereb	y certify that	the foreg	oing and attac	hed infor	mation is con	plete and correc	et as determined from	m all available re	cords (see attached instructions)	*
	me (plęase p					*	Title Productio			
	gnature	aprin	Spe	٤			Date 10/07/200			
Title 18 U.S	S.C. Section ous or fraud	1001 and	Title 43 U.S.C	. Section	1212, make i	t a crime for any	y person knowingly	and willfully to r	make to any department or agenc	y of the United States any

(Continued on page 3) (Form 3160-4, page 2)



Project: USGS Myton SW (UT) Site: SECTION 28

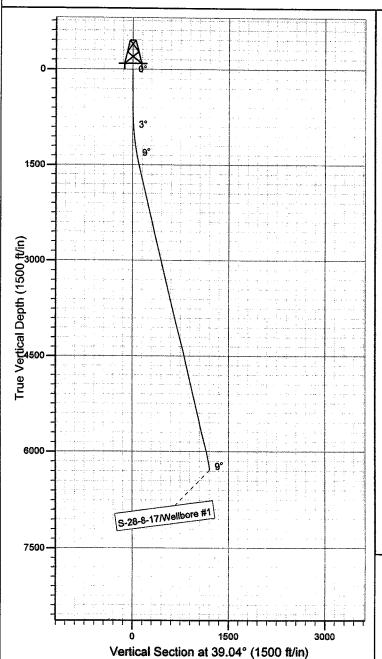
Well: S-28-8-17 Wellbore: Wellbore #1 SURVEY: Wellbore #1

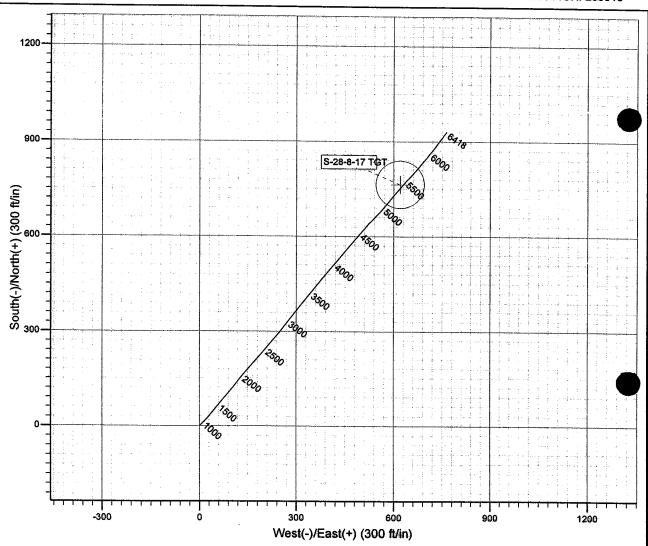
FINAL SURVEY REPORT



Azimuths to True North Magnetic North: 11.54°

Magnetic Field Strength: 52530,6snT Dip Angle: 65.90° Date: 2009/06/08 Model: IGRF200510





DIRECTIONAL & MWD SERVICES

Design: Wellbore #1 (S-28-8-17/Wellbore #1)

Created By: Jim hudson

Date: 8:22, July 21 2009

THIS SURVEY IS CORRECT TO THE BEST OF MY KNOWLEDGE AND IS SUPPORTED BY ACTUAL FIELD DATA.



NEWFIELD EXPLORATION

USGS Myton SW (UT) SECTION 28 S-28-8-17

Wellbore #1

Design: Wellbore #1

Standard Survey Report

21 July, 2009





HATHAWAY BURNHAM





Company:

NEWFIELD EXPLORATION

Project:

USGS Myton SW (UT)

Site:

SECTION 28

Well:

S-28-8-17

Wellbore:

Wellbore #1

Design:

Wellbore #1

Local Co-ordinate Reference:

Survey Calculation Method:

TVD Reference: MD Reference:

Database:

Survey Report

Well S-28-8-17

S-28-8-17 @ 5148.0ft (RIG #2)

S-28-8-17 @ 5148.0ft (RIG #2)

North Reference:

True

Minimum Curvature EDM 2003.21 Single User Db

Project

USGS Myton SW (UT), DUCHESNE COUNTY, UT, USA

Map System: Geo Datum:

US State Plane 1983

North American Datum 1983

Map Zone:

Utah Central Zone

System Datum:

Mean Sea Level

Using geodetic scale factor

Site

SECTION 28, SEC 28 T8S, R17E

0.0 ft

Site Position:

Lat/Long

Northing:

7,204,800.00ft

Latitude:

40° 5' 22.277 N

From: **Position Uncertainty:**

Easting: Slot Radius: 2,057,000.00ft

Longitude:

110° 0' 39.302 W

Grid Convergence:

0.95°

Well

S-28-8-17, SHL LAT: 40 04 59.26, LONG: -110 00 31.76

Well Position

+N/-S +E/-W

0.0 ft

Northing:

7,202,481.16 ft

Latitude:

40° 4' 59.260 N

Position Uncertainty

0.0 ft 0.0 ft Easting:

2,057,624.84 ft

Longitude:

110° 0' 31.760 W

Wellhead Elevation:

ft

Ground Level:

0.0 ft

Wellbore

Wellbore #1

Magnetics

Model Name

Sample Date

Declination (°)

Dip Angle

Field Strength

(nT)

IGRF200510

2009/06/08

11.54

65.90

52.531

Design

Wellbore #1

Audit Notes:

Version:

1.0

Phase:

ACTUAL

Tie On Depth:

0.0

Vertical Section:

Depth From (TVD)

+N/-S

+E/-W

Direction

(ft) 0.0

(ft) 0.0 (ft) 0.0

(°) 39.04

Survey Program

Date 2009/07/21

From (ft)

388.0

To

Survey (Wellbore)

6,418.0 Survey #1 (Wellbore #1)

Tool Name

MWD

Description MVVD - Standard

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
388.0	0.16	54.25	388.0	0.3	0.4	0.5	0.04	0.04	0.00	
419.0	0.11	275.41	419.0	0.3	0.4	0.5	0.82	-0.16	-447.87	
450.0	0.07	85.54	450.0	0.3	0.4	0.5	0.58	-0.13	548.81	
480.0	0.37	27.93	480.0	0.4	0.5	0.7	1.13	1.00	-192.03	
511.0	0.55	33.18	511.0	0.6	0.6	0.9	0.60	0.58	16.94	
541.0	0.73	57.88	541.0	0.9	0.9	1.2	1.08	0.60	82.33	
572.0	0.68	50.34	572.0	1.1	1.2	1.6	0.34	-0.16	-24.32	
603.0	0.97	41.47	603.0	1.4	1.5	2.0	1.02	0.94	-28.61	
633.0	1.06	45.16	633.0	1.8	1.9	2.6	0.37	0.30	12.30	
664.0	1.49	52.54	664.0	2.2	2.4	3.2	1.48	1.39	23.81	
694.0	1.60	55.51	694.0	2.7	3.0	4.0	0.45	0.37	9.90	
725.0	1.96	46.43	725.0	3.3	3.8	5.0	1.47	1.16	-29.29	



HATHAWAY BURNHAM

Survey Report



Company:

NEWFIELD EXPLORATION

Project:

USGS Myton SW (UT)

Site:

SECTION 28 S-28-8-17

Well: Wellbore:

Wellbore #1

Design:

Wellbore #1

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference:

Survey Calculation Method: Database:

Well S-28-8-17

S-28-8-17 @ 5148.0ft (RIG #2)

S-28-8-17 @ 5148.0ft (RIG #2)

True

Minimum Curvature

EDM 2003.21 Single User Db

Survey

rvey				a na taona a na taona						
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
755.0	2.22	49.22	754.9	4.1	4.6	6.0	0.93	0.87	9.30	
786.0	2.66	46.78	785.9	4.9	5.6	7.3	1.46	1.42	-7.87	
817.0	2.79	51.64	816.9	5.9	6.7	8.8	0.85	0.42	15.68	
847.0	3.14	53.02	846.8	6.9	7.9	10.3	1.19	1.17	4.60	
878.0	3.56	46.19	877.8	8.0	9.3	12.1	1.87	1.35	-22.03	
909.0	4.20	45.05	908.7	9.5	10.8	14.2	2.08	2.06	-3.68	
941.0	4.35	45.88	940.6	11.2	12.5	16.5	0.51	0.47	2.59	
973.0	4.50	43.51	972.5	12.9	14.2	19.0	0.74	0.47	-7.41	
1,004.0	4.86	41.84	1,003.4	14.8	15.9	21.5	1.24	1.16	-5.39	
1,036.0	5.30	40.50	1,035.3	16.9	17.8	24.3	1.42	1.38	-4.19	
1,068.0	5.76	39.20	1,067.1	19.3	19.8	27.4	1.49	1.44	-4.06	
1,100.0	6.11	39.58	1,099.0	21.8	21.9	30.7	1.10	1.09	1.19	
1,131.0	6.44	40.61	1,129.8	24.4	24.1	34.1	1.12	1.06	3.32	
1,163.0	7.16	41.01	1,161.6	27.3	26.5	37.9	2.25	2.25	1.25	
1,195.0	7.65	40.41	1,193.3	30.4	29.2	42.0	1.55	1.53	-1.88	
1,226.0	7.93	40.35	1,224.0	33.6	31.9	46.2	0.90	0.90	-0.19	
1,258.0	8.48	38.35	1,255.7	37.2	34.8	50.8	1.94	1.72	-6.25	
1,290.0	8.90	40.52	1,287.3	40.9	37.9	55.6	1.66	1.31	6.78	
1,321.0	9.23	39.45	1,317.9	44.6	41.0	60.5	1.20	1.06	-3.45	
1,353.0	9.75	40.62	1,349.5	48.7	44.4	65.8	1.73	1.63	3.66	
1,384.0	9.96	40.15	1,380.0	52.7	47.9	71.1	0.73	0.68	-1.52	
1,416.0	10.44	39.58	1,411.5	57.1	51.5	76.8	1.53	1.50	-1.78	
1,448.0	10.79	40.10	1,443.0	61.6	55.3	82.7	1.13	1.09	1.63	
1,479.0	11.45	40.63	1,473.4	66.1	59.2	88.6	2.15	2.13	1.71	
1,511.0	11.91	40.06	1,504.7	71.1	63.4	95.1	1.48	1.44	-1.78	
1,606.0	13.40	39.09	1,597.4	87.1	76.6	115.9	1.58	1.57	-1.02	
1,701.0	14.59	40.19	1,689.6	104.8	91.3	138.9	1.28	1.25	1.16	
1,796.0	14.11	38.81	1,781.6	123.0	106.2	162.4	0.62	-0.51	-1.45	
1,891.0	13.50	37.29	1,873.9	140.8	120.2	185.1	0.75	-0.64	-1.60	
1,987.0	12.83	36.96	1,967.4	158.3	133.4	207.0	0.70	-0.70	-0.34	
2,082.0	12.85	40.74	2,060.0	174.7	146.7	228.1	0.88	0.02	3.98	
2,177.0 2,272.0	13.07	39.91	2,152.6	190.9	160.4	249.4	0.30	0.23	-0.87	
2,272.0	13.01	40.43	2,245.1	207.3	174.3	270.8	0.14	-0.06	0.55	
2,367.0	12.88	39.18	2,337.7	223.7	187.9	292.1	0.32	-0.14	-1.32	
2,462.0	12.72	39.05	2,430.3	240.0	201.2	313.1	0.17	-0.17	-0.14	
2,557.0	12.19	37.98	2,523.1	256.0	213.9	333.6	0.61	-0.56	-1.13	
2,652.0	12.59	40.04	2,615.9	271.9	226.8	354.0	0.63	0.42	2.17	
2,747.0	13.29	39.95	2,708.5	288.2	240.4	375.2	0.74	0.74	-0.09	
2,842.0	14.28	37.01	2,800.8	305.9	254.5	397.9	1.28	1.04	-3.09	
2,937.0	13.25	35.09	2,893.0	324.1	267.8	420.4	1.19	-1.08	-2.02	
3,033.0	12.22	37.67	2,986.7	341.2	280.3	441.6	1.23	-1.07	2.69	
3,128.0	13.10	37.40	3,079.3	357.7	293.0	462.4	0.93	0.93	-0.28	
3,223.0	13.12	38.52	3,171.9	374.7	306.3	483.9	0.27	0.02	1.18	
3,318.0	14.15	38.81	3,264.2	392.2	320.3	506.3	1.09	1.08	0.31	
3,413.0	13.05	37.40	3,356.5	409.7	334.1	528.7	1.21	-1.16	-1.48	
3,506.0	13.54	38.70	3,447.0	426.6	347.3	550.0	0.62	0.53	1.40	
3,601.0	13.27	37.60	3,539.4	443.9	360.9	572.1	0.39	-0.28	-1.16	
3,696.0	12.90	39.73	3,632.0	460.7	374.3	593.6	0.64	-0.39	2.24	The state of the s
3,791.0	12.85	41.07	3,724.6	476.8	388.0	614.7	0.32	-0.05	1.41	
3,886.0	14.11	39.25	3,817.0	493.7	402.3	636.9	1.40	1.33	-1.92	
3,981.0	14.25	38.27	3,909.1	511.9	416.8	660.1	0.29	0.15	-1.03	
4,077.0	14.37	40.06	4,002.1	530.3	431.8	683.9	0.48	0.13	1.86	
4,172.0	14.85	39.42	4,094.0	548.7	447.1	707.8	0.53	0.51	-0.67	
4,267.0	14.85	39.40	4,185.9	567.5	462.6	732.2	0.01	0.00	-0.02	



HATHAWAY BURNHAM Survey Report





Company:

NEWFIELD EXPLORATION

Project:

USGS Myton SW (UT)

Site:

SECTION 28

Well: Wellbore: S-28-8-17 Wellbore #1

Design:

Wellbore #1

Local Co-ordinate Reference:

TVD Reference:

Well S-28-8-17 S-28-8-17 @ 5148.0ft (RIG #2)

S-28-8-17 @ 5148.0ft (RIG #2)

True

North Reference: **Survey Calculation Method:**

Database:

MD Reference:

Minimum Curvature

EDM 2003.21 Single User Db

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,362.0	14.92	39.99	4,277,7	586.3	478.2	756.6	0.18	0.07	0.62
4,457.0	13.67	38.98	4,369.7	604.4	493.1	780.0	1.34	-1.32	-1.06
4,552.0	12.77	39.56	4,462.2	621.2	506.9	801.8	0.96	-0.95	0.61
4,647.0	11.89	41.07	4,555.0	636.7	520.0	822.0	0.99	-0.93	1.59
4,742.0	11.90	44.70	4,648.0	651.0	533.3	841.6	0.79	0.01	3.82
4,837.0	12.17	42.98	4,740.9	665.3	547.0	861.3	0.47	0.28	-1.81
4,932.0	12.92	39.91	4,833.6	680.8	560.7	881.9	1.06	0.79	-3.23
5,027.0	12.72	40.79	4,926.3	696.9	574.3	903.0	0.29	-0.21	0.93
5,122.0	12.90	38.50	5,018.9	713.1	587.7	924.0	0.57	0.19	-2.41
5,217.0	13.05	37.56	5,111.5	729.9	600.9	945.4	0.27	0.16	-0.99
5,311.8	12.50	39.03	5,204.0	746.3	613.9	966.3	0.67	-0.58	1.55
S-28-8-17 T	TGT								
5,312.0	12.50	39.03	5,204.1	746.4	613.9	966.4	0.67	-0.57	1.61
5,406.0	12.94	41.09	5,295.8	762.2	627.2	987.1	0.67	0.47	2.19
5,501.0	13.45	42.87	5.388.3	778.3	641.7	1,008.7	0.69	0.54	1.87
5,597.0	12.17	41.82	5,481.9	794.0	656.1	1,030.0	1.36	-1.33	-1.09
5,692.0	12.04	40.30	5,574.8	809.1	669.1	1,049.9	0.36	-0.14	-1.60
5,788.0	13.01	40.32	5,668.5	824.9	682.6	1,070.7	1.01	1.01	0.02
5,883.0	14.22	39.34	5,760.8	842.1	696.9	1,093.0	1.30	1.27	-1.03
5,978.0	14.06	37.58	5,853.0	860.3	711.4	1,116.2	0.48	-0.17	-1.85
6,073.0	13.62	36.26	5,945.2	878.4	725.0	1,139.0	0.57	-0.46	-1.39
6,168.0	12.37	36.44	6,037.8	895.7	737.7	1,160.3	1.32	-1.32	0.19
6,263.0	10.92	36.17	6,130.8	911.1	749.0	1,179.4	1.53	-1.53	-0.28
6,358.0	8.88	34.70	6,224.4	924.4	758.5	1,195.7	2.16	-2.15	-1.55
6,418.0	7.80	33.00	6,283.8	931.6	763.4	1,204.4	1.85	-1.80	-2.83

Target Name									
	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
S-28-8-17 TGT - actual wellpath n - Circle (radius 75.	0.00 nisses by 19. .0)		5,200.0 Ift MD (520	764.1 4.0 TVD, 74	619.6 I6.3 N, 613.9	7,203,255.38 E)	2,058,231.58	40° 5' 6.810 N	110° 0' 23.788 '

Approved By:

Checked By:

Date:

11		HEADER		INFORMATION					
Н		COMPANY		:		NEWFIELD		EXPLORAT	ION
Н		FIELD		:		USGS		Myton	SW
Н		SITE		:		SECTION		28	
Н		WELL		:		S-28-8-17			
Н		WELLPATH:		Wellbore		#1			
Н		DEPTHUNT:		ft					
Н		SURVDATE:			7/21/2009)			
Н		DECLINATION		CORR.	.,,				
Н		=			10.59	TO		GRIDH	
Н		WELL		INFORMATION		10		ONDIT	
Н		WELL		EW		MAP			2057625
H		WELL		NS		MAP			7202481
н		DATUM		ELEVN				5148	
H		VSECT		ANGLE					
H		VSECT		NORTH		•		39.04	
Н						•		0	
п Н		VSECT		EAST 		:		0	
H		SURVEY	-	ТҮРЕ		INFORMATI	ION		
Н			388 -	-				SURVEY	#1
H									
Н		SURVEY	ı	LIST					
MD		INC	,	AZI		TVD		NS	EW
	0		0		0		0	0	0
	388	0	.16		54.25			0.32	
	419		.11		275.41				0.45
	450		.07		85.54		450		
							750	0.00	
	480		.37		27 92		<i>ል</i> ጰበ	0.44	
	480 511	0	.37		27.93 33.18			0.44	0.5
	511	0	.55		33.18		511	0.65	0.5 0.63
	511 541	0 0 0	.55 .73		33.18 57.88		511 541	0.65 0.87	0.5 0.63 0.87
	511 541 572	0 0 0 0	.55 .73 .68		33.18 57.88 50.34		511 541 571.99	0.65 0.87 1.09	0.5 0.63 0.87 1.18
	511541572603	0 0 0 0	.55 .73 .68 .97		33.18 57.88 50.34 41.47		511 541 571.99 602.99	0.65 0.87 1.09 1.41	0.5 0.63 0.87 1.18 1.49
	511 541 572 603 633	0 0 0 0 0	.55 .73 .68 .97 .06		33.18 57.88 50.34 41.47 45.16		511 541 571.99 602.99 632.99	0.65 0.87 1.09 1.41 1.79	0.5 0.63 0.87 1.18 1.49
	511 541 572 603 633 664	0 0 0 0 0 1	.55 .73 .68 .97 .06		33.18 57.88 50.34 41.47 45.16 52.54		511 541 571.99 602.99 632.99 663.98	0.65 0.87 1.09 1.41 1.79 2.24	0.5 0.63 0.87 1.18 1.49 1.86 2.38
	511 541 572 603 633 664 694	0 0 0 0 0 1	.55 .73 .68 .97 .06 .49		33.18 57.88 50.34 41.47 45.16 52.54 55.51		511 541 571.99 602.99 632.99 663.98 693.97	0.65 0.87 1.09 1.41 1.79 2.24 2.72	0.5 0.63 0.87 1.18 1.49 1.86 2.38 3.03
	511 541 572 603 633 664 694 725	0 0 0 0 1 1	.55 .73 .68 .97 .06 .49 1.6		33.18 57.88 50.34 41.47 45.16 52.54 55.51 46.43		511 541 571.99 602.99 632.99 663.98 693.97 724.95	0.65 0.87 1.09 1.41 1.79 2.24 2.72 3.33	0.5 0.63 0.87 1.18 1.49 1.86 2.38 3.03 3.78
	511 541 572 603 633 664 694 725 755	0 0 0 0 1 1 1 2	.55 .73 .68 .97 .06 .49 1.6 .96		33.18 57.88 50.34 41.47 45.16 52.54 55.51 46.43 49.22		511 541 571.99 602.99 632.99 663.98 693.97 724.95 754.93	0.65 0.87 1.09 1.41 1.79 2.24 2.72 3.33 4.06	0.5 0.63 0.87 1.18 1.49 1.86 2.38 3.03 3.78 4.59
	511 541 572 603 633 664 694 725 755 786	0 0 0 0 0 1 1 1 2	.55 .73 .68 .97 .06 .49 1.6 .96		33.18 57.88 50.34 41.47 45.16 52.54 55.51 46.43 49.22 46.78		511 541 571.99 602.99 632.99 663.98 693.97 724.95 754.93 785.9	0.65 0.87 1.09 1.41 1.79 2.24 2.72 3.33 4.06 4.94	0.5 0.63 0.87 1.18 1.49 1.86 2.38 3.03 3.78 4.59 5.57
	511 541 572 603 633 664 694 725 755 786 817	0 0 0 0 1 1 1 2 2	.55 .73 .68 .97 .06 .49 1.6 .96 .22 .66		33.18 57.88 50.34 41.47 45.16 52.54 55.51 46.43 49.22 46.78 51.64		511 541 571.99 602.99 632.99 663.98 693.97 724.95 754.93	0.65 0.87 1.09 1.41 1.79 2.24 2.72 3.33 4.06	0.5 0.63 0.87 1.18 1.49 1.86 2.38 3.03 3.78 4.59
	511 541 572 603 633 664 694 725 755 786 817 847	0 0 0 0 1 1 1 2 2	.55 .73 .68 .97 .06 .49 1.6 .96		33.18 57.88 50.34 41.47 45.16 52.54 55.51 46.43 49.22 46.78		511 541 571.99 602.99 632.99 663.98 693.97 724.95 754.93 785.9	0.65 0.87 1.09 1.41 1.79 2.24 2.72 3.33 4.06 4.94	0.5 0.63 0.87 1.18 1.49 1.86 2.38 3.03 3.78 4.59 5.57
	511 541 572 603 633 664 694 725 755 786 817	0 0 0 0 1 1 1 2 2 2	.55 .73 .68 .97 .06 .49 1.6 .96 .22 .66		33.18 57.88 50.34 41.47 45.16 52.54 55.51 46.43 49.22 46.78 51.64		511 541 571.99 602.99 632.99 663.98 693.97 724.95 754.93 785.9 816.87	0.65 0.87 1.09 1.41 1.79 2.24 2.72 3.33 4.06 4.94 5.9	0.5 0.63 0.87 1.18 1.49 1.86 2.38 3.03 3.78 4.59 5.57 6.68
	511 541 572 603 633 664 694 725 755 786 817 847	0 0 0 0 1. 1. 2. 2. 2. 3.	.55 .73 .68 .97 .06 .49 1.6 .96 .22 .66 .79		33.18 57.88 50.34 41.47 45.16 52.54 55.51 46.43 49.22 46.78 51.64 53.02		511 541 571.99 602.99 632.99 663.98 693.97 724.95 754.93 785.9 816.87 846.83	0.65 0.87 1.09 1.41 1.79 2.24 2.72 3.33 4.06 4.94 5.9 6.85	0.5 0.63 0.87 1.18 1.49 1.86 2.38 3.03 3.78 4.59 5.57 6.68 7.91
	511 541 572 603 633 664 694 725 755 786 817 847 878	0 0 0 0 1 1 1 2 2 2 3 3	.55 .73 .68 .97 .06 .49 1.6 .96 .22 .66 .79		33.18 57.88 50.34 41.47 45.16 52.54 55.51 46.43 49.22 46.78 51.64 53.02 46.19		511 541 571.99 602.99 632.99 663.98 693.97 724.95 754.93 785.9 816.87 846.83	0.65 0.87 1.09 1.41 1.79 2.24 2.72 3.33 4.06 4.94 5.9 6.85 8.03	0.5 0.63 0.87 1.18 1.49 1.86 2.38 3.03 3.78 4.59 5.57 6.68 7.91 9.28
	511 541 572 603 633 664 694 725 755 786 817 847 878 909	0 0 0 0 0 1 1 1 2 2 2 3 3	.55 .73 .68 .97 .06 .49 1.6 .96 .22 .66 .79 .14		33.18 57.88 50.34 41.47 45.16 52.54 55.51 46.43 49.22 46.78 51.64 53.02 46.19 45.05		511 541 571.99 602.99 632.99 663.98 693.97 724.95 754.93 785.9 816.87 846.83 877.78 908.71	0.65 0.87 1.09 1.41 1.79 2.24 2.72 3.33 4.06 4.94 5.9 6.85 8.03 9.5	0.5 0.63 0.87 1.18 1.49 1.86 2.38 3.03 3.78 4.59 5.57 6.68 7.91 9.28 10.78 12.48
	511 541 572 603 633 664 694 725 755 786 817 847 878 909 941	0 0 0 0 1 1 1 2 2 2 3 3 4 4	.55 .73 .68 .97 .06 .49 1.6 .96 .22 .66 .79 .14		33.18 57.88 50.34 41.47 45.16 52.54 55.51 46.43 49.22 46.78 51.64 53.02 46.19 45.05 45.88 43.51		511 541 571.99 602.99 632.99 663.98 693.97 724.95 754.93 785.9 816.87 846.83 877.78 908.71 940.62 972.52	0.65 0.87 1.09 1.41 1.79 2.24 2.72 3.33 4.06 4.94 5.9 6.85 8.03 9.5 11.17 12.92	0.5 0.63 0.87 1.18 1.49 1.86 2.38 3.03 3.78 4.59 5.57 6.68 7.91 9.28 10.78 12.48 14.22
	511 541 572 603 633 664 694 725 786 817 847 878 909 941 973	0 0 0 0 0 1 1 1 2 2 2 3 3 3	.55 .73 .68 .97 .06 .49 1.6 .96 .22 .66 .79 .14 .56 4.2		33.18 57.88 50.34 41.47 45.16 52.54 55.51 46.43 49.22 46.78 51.64 53.02 46.19 45.05 45.88		511 541 571.99 602.99 632.99 663.98 693.97 724.95 754.93 785.9 816.87 846.83 877.78 908.71	0.65 0.87 1.09 1.41 1.79 2.24 2.72 3.33 4.06 4.94 5.9 6.85 8.03 9.5	0.5 0.63 0.87 1.18 1.49 1.86 2.38 3.03 3.78 4.59 5.57 6.68 7.91 9.28 10.78 12.48

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1100	6.11	39.58	1098.97	21.84	21.87
1131	6.44	40.61	1129.79	24.44	24.05
1163	7.16	41.01	1161.56	27.3	26.53
1195	7.65	40.41	1193.29	30.43	29.22
1226	7.93	40.35	1224.01	33.63	31.94
1258	8.48	38.35	1255.68	37.16	34.83
1290	8.9	40.52	1287.31	40.9	37.91
1321	9.23	39.45	1317.92	44.64	41.04
1353	9.75	40.62	1349.49	48.68	44.44
1384	9.96	40.15	1380.03	52.72	47.88
1416	10.44	39.58	1411.52	57.07	51.51
1448	10.79	40.1	1442.98	61.59	55.28
1479	11.45	40.63	1473.39	66.15	59.16
1511	11.91	40.06	1504.73	71.09	63.35
1606	13.4	39.09	1597.42	87.13	76.6
1701	14.59	40.19	1689.6	104.82	91.26
1796	14.11	38.81	1781.64	122.98	106.24
1891	13.5	37.29	1873.89	140.83	120.22
1987	12.83	36.96	1967.37	158.26	133.42
2082	12.85	40.74	2059.99	174.69	146.65
2177	13.07	39.91	2152.57	190.94	160.44
2272	13.01	40.43	2245.12	207.32	174.27
2367	12.88	39.18	2337.71	223.66	187.89
2462	12.72	39.05	2430.35	239.99	201.17
2557	12.19	37.98	2523.11	256.02	213.93
2652	12.59	40.04	2615.9	271.85	226.76
2747	13.29	39.95	2708.49	288.15	240.43
2842	14.28	37.01	2800.75	305.88	254.5
2937	13.25	35.09	2893.02	324.14	267.81
3033	12.22	37.67	2986.66	341.19	280.34
3128	13.1	37.4	3079.35	357.7	293.03
3223	13.12	38.52	3171.87	374.69	306.28
3318	14.15	38.81	3264.19	392.17	320.28
3413	13.05	37.4	3356.53	409.74	334.07
3506	13.54	38.7	3447.04	426.58	347.25
3601	13.27	37.6	3539.45	443.9	360.86
3696	12.9	39.73	3631.98	460.69	374.29
3791	12.85	41.07	3724.59	476.81	388.01
3886	14.11	39.25	3816.98	493.74	402.27
3981	14.25	38.27	3909.08	511.89	416.84
4077	14.37	40.06	4002.1	530.28	431.83
4172	14.85	39.42	4094.03	548.71	447.15
4267	14.85	39.4	4185.86	567.52	462.6
4362	14.92	39.99	4277.67	586.3	478.19
4457	13.67	38.98	4369.73	604.4	493.11
4552	12.77	39.56	4462.21	621.22	506.86
4647	11.89	41.07	4555.02	636.69	519.98

4742	11.9	44.7	4647.98	651.03	533.3
4837	12.17	42.98	4740.89	665.32	547.01
4932	12.92	39.91	4833.62	680.79	560.65
5027	12.72	40.79	4926.25	696.86	574.3
5122	12.9	38.5	5018.89	713.08	587.73
5217	13.05	37.56	5111.47	729.88	600.87
5312	12.5	39.03	5204.11	746.37	613.89
5406	12.94	41.09	5295.81	762.2	627.21
5501	13.45	42.87	5388.3	778.31	641.72
5597	12.17	41.82	5481.91	794.04	656.06
5692	12.04	40.3	5574.8	809.06	669.15
5788	13.01	40.32	5668.51	824.93	682.61
5883	14.22	39.34	5760.84	842.11	696.93
5978	14.06	37.58	5852.96	860.28	711.37
6073	13.62	36.26	5945.2	878.45	725.02
6168	12.37	36.44	6037.77	895.65	737.68
6263	10.92	36.17	6130.81	911.1	749.03
6358	8.88	34.7	6224.39	924.4	758.52
6418	7.8	33	6283.76	931.62	763.37

(UT)

MWD

VS		DLS		
	0		0	
	0.52		0.04	
	0.55		0.82	
	0.54		0.58	
	0.65		1.13	
	0.9		0.6	
	1.22		1.08	
	1.59		0.34	
	2.03		1.02	
	2.56		0.37	
	3.24		1.48	
	4.02		0.45	
4	4.96		1.47	
(5.04		0.93	
7	7.35		1.46	
8	3.79		0.85	
-	10.3		1.19	
12	2.08		1.87	
14	1.17		2.08	
16	5.54		0.51	
18	3.99		0.74	
21	52		1.24	
24	.35		1.42	
27	.43		1.49	

30.74	1.1
34.13	1.12
37.92	2.25
42.04	1.55
46.24	0.9
50.8	1.94
55.64	1.66
60.52	1.2
65.8	1.73
71.1	0.73
76.77	1.53
82.66	1.13
88.64	
95.12	2.15
	1.48
115.93	1.58
138.9	1.28
162.44	0.62
185.1	0.75
206.96	0.7
228.06	0.88
249.36	0.3
270.79	0.14
292.06	0.32
313.11	0.17
333.6	0.61
353.98	0.63
375.25	0.74
397.88	1.28
420.45	1.19
441.58	1.23
462.4	0.93
483.94	0.27
506.33	1.09
528.67	1.21
550.05	0.62
572.07	0.39
593.57	0.64
614.73	0.32
636.87	1.4
660.14	0.29
683.87	0.48
707.83	0.53
732.18	0.01
756.58	0.18
780.03	1.34
801.76	0.96
822.04	0.99

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841.56	0.79
861.3	0.47
881.91	1.06
902.98	0.29
924.04	0.57
945.37	0.27
966.37	0.67
987.06	0.67
1008.72	0.69
1029.96	1.36
1049.87	0.36
1070.68	1.01
1093.04	1.3
1116.25	0.48
1138.96	0.57
1160.29	1.32
1179.45	1.53
1195.75	2.16
1204.41	1.85